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THE PRESIDENT'S ADDRESS.

THE MISSION OF THE AMERICAN MEDICAL ASSOCIATION.

Delivered at the Thirth-ninth Annual Meeting of the American Medical Association, Cincinnati, Ohio, May 8, 1888.

BY A. Y. P. GARNETT, M.D.,

OF WASHINGTON, D. C.

Gentlemen of the American Medical Association:

Unlike my distinguished predecessor of the past year, who presented you with an able address replete with speculative interest and scientific research, I shall leave the abstruse problems of our science to be discussed and elaborated by the different Sections into which this Association has been divided with special reference to such themes and such discussions.

In casting about for a subject more concrete in its nature and directly useful in its application, I have determined to submit for your consideration a few practical reflections upon the mission of the American Medical Association.

I am especially moved to select this subject at this time by the fact that at no period since the formation of the American Medical Association have its enemies been so bold, so reckless, and so unscrupulous in their efforts to destroy its influence and power with the medical men of this country.

The paternal relation held by this organization to the entire medical profession of the United States imposes upon it duties and responsibilities of the gravest character. It stands out before the world as the chosen custodian of all that pertains to the preservation and advancement of professional interests, as well as to medical science *per se;* it is intrusted with the delicate and difficult task of elevating and maintaining the medical character of this country upon the highest moral and intellectual plane.

Taking a retrospective view through the almost half-century of its existence, we have no reason to be discouraged when we consider what has been accomplished; indeed, we have cause for congratulation as we recognize the many evidences of progress due directly to its influence, important results which could only have been achieved by combined and co-operative effort. The crystallizing at its very birth of the hitherto segregated elements of medical strength into one compact organization gave to it a power and authority recognized and felt by the entire medical profession of this country.

But while we may well feel gratified by a contemplation of the fruits of our labors in the past, it is obviously important that we should not be flattered into the belief that we have accomplished our mission, and permit ourselves to lapse into supine indifference with regard to the preëminently important object which yet remains to be worked out, I trust, through the instrumentality of this body. I refer, gentlemen, to a radical and thorough reform in the present medical education of the United States—the subject which, at this moment, presses itself more urgently than all others upon our attention.

Until this has been worked out we can never hope to see realized the grand designs of those wise and conservative men who, inspired by a true love for the profession of medicine and actuated by a high and honorable ambition for its success and commanding influence in this country, conceived and perfected the machinery which they considered adequate to the duty of achieving such a noble purpose.

Have we, gentlemen, who followed them, so controlled and directed this machinery as to fulfill their anticipations? Have we as yet fully tested its capacity to meet such expectations? Have we exhausted with unavailing results all the means at our command? To me it seems not.

In directing your attention to this apparent dereliction on the part of this Association, I trust that I may not be regarded as a sensorious pessimist, or that I am actuated by any other than the most earnest and sincere love for our noble profession.

It is but natural that those of us who have at heart the true interests of the medical profession, and who desire to encourage such progress and effect such reforms as must permeate and influence each section of our country, should make every endeavor to elevate our system of medical education to a standard equal in dignity and attainment to that which obtains in Europe, and hopefully look to this great representative body as the only central, dominating power through which such reforms are to be accomplished and perfected.

Our annual meetings must not be regarded solely for the purpose of considering the science of medicine either in its theoretical or practical aspect and supplemented by the pleasures of social intercourse. While we have ample cause to be gratified with the rapid progress made by some departments of medicine in this country within the last decade under the direction and stimulus of this Association, we are still confronted by the fact that very little has been effect-

ed in the direction of a general reform in the medical schools.

We all know that this subject of medical education and medical license has been an almost endless theme for discussion, coeval, indeed, with the establishment of medical schools in America, and more particularly has it been earnestly and ably considered since the organization of this Association; yet the question still presents itself, What can the American Medical Association do to further raise and promote a higher standard of medical education in the United States, to curtail the number of medical schools, and thereby gradually restrict to a conservative limit the annual hosts of graduates turned loose upon the public by those institutions? It will be borne in mind that in order to effect these desirable ends the initial step must be taken by this body in some mandatory form—experience has demonstrated that separate State societies and individual college regulations looking to such reformation have so far proved conspicuously futile. For a long period all measures brought before this Association having for their object an interference with or material modification of the systems pursued by the medical colleges were met by a determined and successful opposition on the part of those members who represented such institutions.

So manifest did it become that no important change could ever be effected in this direction while these schools were permitted to be represented as such in this body by their own officers that an amendment to the constitution was adopted abolishing this feature of representation in order, as it was hoped, that the proceedings of the Association might not be trammeled or embarrassed by the misguided efforts of such delegates.

Whilst the purpose and intent of this move was, as already stated, to free the Association from the predominating power of the schools and permit it to legislate in a fair, unprejudiced, and conservative spirit upon this important question, it has so far unquestionably failed to do so. It occurs to me that an explanation of this may be found in the fact that a large proportion of those who now attend our annual meetings are directly or indirectly connected with medical institutions, and no doubt are to a large extent, unconsciously, perhaps, influenced in their conduct on this floor by the supposed interest of their respective schools.

Permit me to disclaim here any purpose or desire to impugn the motives or loyalty to our profession of these distinguished representatives of our medical colleges. From my standpoint alone do I offer this hypothetical criticism upon their conduct in this regard; and while I cheerfully concede to them the honor and merit of having largely participated in laying the foundation of this Association, and having subsequently sustained its character, influence, and power as an agent for the general welfare of the medical profession in the United States, I can not permit myself to ignore the fact that they have not, collectively and unitedly, coöperated and wielded the power which they indisputably possess to advance and elevate our standard of medical education. Nor do the records of the American Medical Association at any period of its past history show that unselfish and honest effort in this direction on the part of those who control and direct the educational movements of our profession which can either challenge our admiration or command our unqualified approval.

While it can not be denied that there are medical colleges in this country unsurpassed by those of Europe in their essential appointments and facilities for the education of medical students, the equally undeniable fact remains that we fall far behind them in the systems of study pursued.

This is more unfortunate and baneful when we consider the radical difference in point of education between the mass of students in this country and those of Europe. Contrasting the two from this standpoint, we find, as a rule, when the European student aspires to become a professional man, he recognizes the fact that in order to pass the ordeal of a college course successfully he must have the basis of a preliminary education, in most cases including a classical one. He is confronted at the very threshold by the rigid requirements of a fixed collegiate standard. He knows and appreciates that unless he possesses some educational capital or mental training to build upon he can not hope to master the complex and difficult work before him.

On the contrary, in this country the multitude of medical schools scattered throughout the land, to be found in almost every town and village, offering inducements to the uneducated as well as the educated by low fees and short terms of study to enter the profession, added to the almost universal desire prevailing among the working classes to become doctors and lawyers, have not failed to work incalculable mischief. The half-educated artisan, ambitious of becoming a professional man, meeting with no obstacle in the way of a preliminary education, throws aside his implements of trade and walks into the halls of some medical school to emerge therefrom after two short courses of lectures a full-fledged M.D., licensed to go forth as the accredited representative of a so-called learned profession. This, gentlemen, is no exaggerated picture resting alone upon some isolated or exceptional instance, but a practical fact of frequent occurrence, and one for which the schools are directly responsible, since they alone have the power to correct this evil. I am not unmindful of the many labored and specious arguments which have been advanced in defense of the schools, and the efforts made to relieve them of all censure in this regard by placing the responsibility on other shoulders. We have been reminded of the fact that all great revolutions move slowly; that we must not expect to accomplish radical reforms in our system of medical education in a few years; we must patiently wait for the seeds of reform, which, having been sown in rich soil, will in good time and season be sure to spring up, flourish, and reach a glorious fruition. All over the land, it is argued, under the stimulus of this Association, State and county societies have been organized upon a firm basis, engaged in active and efficient work, and destined to prove the direct instruments through which the desired reform is to be effected.

We *have* waited, and nearly half a century has rolled by in anxious expectation of seeing these educational centers take the initiative in pushing forward this great object, an object which in reality dominated all other considerations at the very birth of this Association. Have those expectations been realized? On the contrary, with a few notable exceptions, they have turned a deaf ear to the repeated suggestions and earnest demands of this body, and stubbornly pursued that course which they selfishly believed would secure to them the largest patronage through the shortest route from the hall of the matriculate to the platform of the licentiate. We are further told that colleges should not be held responsible for graduating illiterate and incompetent students. It was not reasonable to suppose that the faculties of those institutions would ignore or disregard the certificates and letters of recommendation presented by students applying to enter a college, when such letters were furnished by preceptors who were, perhaps, personal friends of some one or more of the professors. It does not seem to have occurred to the authors of such arguments that the final judgment which was to determine the student's fitness to receive a diploma and authorize him to present himself to the public as a competent person to practice medicine rests entirely with those who issue such diplomas. Can they so far disregard their duty to the profession and to the public as to accept the partial judgments or recommendations of irresponsible or prejudiced preceptors?

Almost all institutions of learning that possess the authority to grant licenses require preliminary examinations to determine the qualifications of students before accepting them as such, notably the two national academies of the United States—the Army and Navy. Why should not the medical schools, whose vast and comprehensive field of study more imperatively demands it, also require such examinations? The catalogues of many colleges state that certificates of educational acquirements are required of all students before matriculating; but I have the strongest grounds for believing that this rule is far more honored in the breach than in the observance.

Again, it has been alleged, by way of explanation for the recognized and unfortunate educational deficiences pervading many medical communities, that it proceeds from a lack of study on the part of the general practitioners, especially those residing in rural districts, who find more congenial occupation in discussing politics, hunting, and farming than in the study of medical works, that the schools should not be held responsible for this condition of things. I would reply to this apology by asking if such members of the profession are, by reason of their surroundings, to lapse into this state of indifference and ignorance, is it not the more important that they should, before completing a collegiate course and receiving a diploma, be required to lay a solid foundation of education, both academic and medical, that would stand by them through this rust of negligence and decay of interest, than to commence in ignorance, progress in ignorance, and, like unto the man to whom only one talent was given, go and hide that in the earth? No, gentlemen; there is no escape for the medical schools of this country from the responsibility of the obvious defects in our system of medical education; and the odium of a failure by them to reform that system must, like the shirt of Nessus, ever cling to them.

That the professions of law and medicine are overcrowded in this country, no man of common observation will deny. The ratio of professional men in the United States to the population exceeds that of any other country in the civilized world, so that any legitimate means of checking this evil which can be devised and carried into practical effect must be hailed by the medical world, as well as the general public, as an inestimable boon. The statistics recently published by the Illinois State Board of Health tending to show the annual number of graduates in medicine within the last three years, and the conclusions based upon those statistics published by the medical journals of the country, I have reason to believe, are not entirely accurate. In support of this opinion and the views expressed in the foregoing part of this address I shall take the liberty of directing your attention to a résumé of statistics bearing upon this subject, furnished me through the kindness and courtesy of Hon. N. H. R. Dawson, United States Commissioner of Education.

These will, no doubt, exhibit in a more forcible and impressive manner to your minds the especial subject under consideration than any individual argument, however logical or conclusive, that could be presented, particularly when it is remembered that they are prepared under the immediate authority and direction of the United States Government, having at its command far greater resources than any one State or county could employ.

"Total number of medical schools in the United States, 126; of these 95 are regular, 11 are 'eclectic,' 13 are 'homeopathic,' 3 are 'physio-medical,' and 4 are too indefinite for accurate description.

"Of these, 2 regular, 1 'eclectic,' 1 'physio-medical,' and 4 'indefinite' schools are not recognized by this Bureau, by State boards of health, by medical licensing boards, etc. Four other schools have been established or organized so recently that they reported no students or graduates for the year 1885–86. There remain 89 regular, 10 'eclectic,' 13 'homeopathic,' and 2 'physio-medical' schools from which statistics were obtained and tabulated in another part of that letter.

"Proceeding thereto, the list of medical schools on pages 5–11 showed that 63 regular, 2 'eclectic' and 4 'homeopathic' schools admitted male students only; that 1 'homeopathic' and 4 regular schools admitted female students only; that 19 regular, 8 'eclectic,' 8 'homeopathic,' and 2 physio-medical' schools admitted both male and female students; and that 3 other schools, all regular, admitted colored pupils, one of these admitting both sexes and both races. As a whole, 70 schools admitted males only, 5 women only, 38 both sexes, and 1 everbody of suitable age.

"Studying this table further, we find two methods of instruction prevailing. One, the older, requires a student to attend substantially the same course of lectures twice before his examination for a degree; the other requires him to attend three distinct and

graded courses of lectures before his final examination. Of the 114 reporting schools, 1 requires only 1 course of lectures; 86 require 2 courses; these 87 I group together as following the older, or *repetition* method; 26 schools require 3 graded courses, and 1 school 4 such courses; these 27 I group together as prescribing the newer, or *graded*, method, with the following result as regards *numbers*:

Designations.	Graded method.			Repetition method.			All.		
	Schools.	Students.	Graduates.	Schools.	Students.	Graduates.	Schools.	Students.	Graduates.
Regular	21	1,839	383	68	7,752	2,826	89	9,591	3,209
Eclectic	1	24	14	9	578	187	10	602	201
Homeopathic	5	314	104	8	748	351	13	1,062	455
Physio-medical	0	0	0	2	47	28	2	47	28
All designations	27	2,177	501	87	9,125	3,392	114	11,302	3,893

"This tabular summary is not introduced in order to discuss it, but in order to furnish a basis of *concrete* numbers, upon which the *percentage* numbers given below may be verified.

"The percentages are calculated so as to show for each kind of medical school the proportion preferring each of the two methods. I give first those relating to the 'graded' method:

Designations.	Percentage of—		
	Schools.	Students.	Graduates.
Homeopathic	38.5	29 6	22.9
Regular	23.6	19.2	11.9
Eclectic	10.0	4.0	7.0
Physio-medical	.0	.0	.0
All designations	23.7	19.3	12.9

"Next those percentages relating to the 'repetition' method:

Designations.	Percentage of—		
	Schools.	Students.	Graduates.
Eclectic	90.0	96.0	93.0
Regular	76.4	80.8	88.1
Homeopathic	61.5	70.4	77.1
All designations	76.3	80.7	87.1

"The foregoing percentages are instructive in two ways. We may compare the proportion designated 'regular' with the others in its own group, or with the proportion similarly named in the other group.

"The percentages of 'regular' schools, students, and graduates following the 'graded' method of instruction was less than the corresponding homeopathic percentages in that group. This would indicate that the regular schools, as a whole were less careful in the *method* of their instruction, so far as the grading of studies is concerned. Is this a sign of less care in other ways? Does it explain any part of the success of well-educated homeopathic physicians in modern times? I do not draw this as a conclusion, but submit it as a query.

"Upon comparing the percentages designated 'regular' in both groups, we see that those in the 'repetition' group exceed those in the 'graded' group 52.8 as to schools,

61.6 as to students,

76.2 as to graduates.

"This indicates that regular schools following the older, two-course, or 'repetition' method admit students more readily, and confer degrees more copiously, than regular schools prescribing 'graded' courses of instruction. Do the schools in the 'repetition' group admit and graduate more readily *because* they have, as a whole, a lower ideal? I do not assert this. I ask the question.

"Returning now to the tabular summary on page 2 of this letter, I extract and summarize yet further the statistics relating to 'regular' medical education, and give percentages of graduates to students in each group, as follows:

Method of Instruction.	Number of students.	Number of graduates.	Per cent. of graduates to students.
21 "graded" colleges	1,839	383	20.8
68 "repetition" colleges	7,752	2,826	36.4
89 All methods	9,591	3,209	34.5

"This indicates a possibility that the requirements for graduation from the 21 colleges prescribing a graded course are more severe than those of the larger group. If the per cent. of graduates from the 'repetition' method colleges had been 20.8 instead of 36.4, *they would have graduated only 1,612, instead of 2,826*. On the other hand, if the 'graded' method colleges had graduated as many in proportion, 36.4 per cent., as the others, they would have granted diplomas to 669, instead of 383. If all these schools had graduated 20.8 per cent. of their students, those graduates would have numbered 1,995; if they had graduated 34.5 per cent., the graduates would have numbered 3,495. They actually graduated 3,209, or 34.5 per cent."

For the present year 1888, upon the basis of a population in the United States of 61,420,000, the ratio of practitioners of medicine to the population will average about 1 to every 580. In the city of Washington we have 1 practitioner to about every 485 inhabitants.

This very carefully prepared analysis of the medical schools of the United States, it will be observed, like that contained in the statistical report of the Illinois State Board of Health, rests largely upon the correctness of the catalogues put forth by these schools, and, though possessing some additional sources of information, can not be regarded as conclusively accurate, for the reason, as I have elsewhere stated, that in many instances the catalogues of colleges do not correctly represent the practical operations of

those institutions. In the city of Washington, with a population of 180,000 inhabitants, we have four medical schools, with the following list of matriculates during the past three years: One school of 41⅔ per annum, or 125 for the three years; one school of 30 per annum or 90 for three years; one of 21 ⅔ per annum, or 65 for three years; one school of 3⅓ per annum, or 10 for three years—making a total of 113⅔ matriculates per annum divided between four schools. Three of these require a three years' course of study; one requires that the student must belong to the *genus homo*, without regard to age, sex, color, or previous condition. With these figures before us, gentlemen, no fears, it seems to me, need be entertained of limiting to too small a number the professional men in this country; the supply will always be found equal to the demand. Even as far back as the days of Addison, more than a hundred years ago, when the facilities for obtaining a medical education must have been greatly restricted as compared with the present time, you will find the following language used by that celebrated author of the "Spectator" in speaking of the learned professions. He says:

"If, in the third place, we look into the profession of physic, we shall find a most formidable body of men; the sight of them is enough to make a man serious, for we may lay it down as a maxim that when a nation abounds in physicians it grows thin in people. This body of men in our own country may be described like the British army in Cæsar's time—some of them slay in chariots and some on foot."

If they are to continue to augment, through the reckless conduct of the colleges in this country, in the same ratio as they have done in the past ten years, let us at least endeavor to place them beyond the reproach and ridicule which at present so often attach to the name of doctor.

Entertaining the views above expressed, based in part upon these tabulated expositions, and inspired by the hope of initiating some practical move in the direction of educational reform, I respectfully submit for your consideration the following suggestions:

PROPOSITION 1. That a standing committee, to be called a committee on legislation, be appointed for each State, Territory, and the District of Columbia, to consist of five members of the medical profession in good standing, three of whom shall have no official connection with any medical school or college, whose duty it shall be to carry out as far as possible the following instructions:

First. That each one of said committees, or a majority thereof, shall attend the sessions of their respective Legislatures, or from time to time as their duties may require, for the purpose of using all honorable means looking to the reduction of the number of medical schools in the United States, and a consequent diminution in the annual number of medical graduates; that as a practical measure to this end they urge the passage of a law requiring that in the future granting of charters for creating medical schools, there shall be a clause in every such charter, requiring that all schools or colleges thus created shall demand a full term of four years' study before granting a diploma to any student thereof, and that no student shall be admitted to matriculate who has not passed a satisfactory examination, both oral and written, in the ordinary branches of academic study; and, further, that any college failing to show a greater number than fifty matriculates annually for three consecutive years shall forfeit its charter and be abolished.

Second. That they use all diligent effort to secure an ordinance creating in each State and Territory where no such board at present exists, and the District of Columbia, a board of medical examiners, which shall have no connection with any medical school, and which shall be required to examine all applicants for license to practice medicine in their respective States, Territories, and the District of Columbia; and that any person who may be detected in practicing any branch of the healing art without a license granted by said board shall be subject to such penalties as the law may provide. That this committee may be authorized by statute to select and nominate to the governors of the States, Territories, and the District of Columbia seven competent and learned members of the medical profession to constitute said board of examiners, who shall have the exclusive power to issue licenses to practice the art and science of medicine and surgery.

Third. That the chairman of said committees of five be required to submit at each annual meeting of this association a report embracing a full statement of what has been accomplished by each.

PROPOSITION 2. That the faculties of the several medical schools within the limits of the United States be once more urgently requested to call a convention at some central point for the purpose of consultation, and adopting some general and uniform system of medical education more comprehensive and rigid in its requirements, and more in accord with the spirit of the age and the advanced progress of medical science, suggesting a four years' term of study, the requirement of a preliminary education, including some knowledge of the classics.

That any college or school which shall refuse to enter into such an arrangement as may be decided upon by said convention shall be excluded from all connection with the American Medical Association, and its alumni not recognized as members of the regular profession.

I am aware that these suggestions embrace some very radical and seemingly impracticable changes; but as they point, in my judgment, to the right direction, I trust that they may not prove to be seeds sown upon barren soil. Be that as it may, I shall at least enjoy the consciousness of having honestly, conscientiously, and fearlessly met the great and pressing issue of the day within the domain of our profession, and of having executed, to the best of my ability, the most important duty imposed by the responsible position to which you have elevated me.

It is with no little satisfaction that I can here refer to the recent successful meeting of the Ninth International Medical Congress which took place at the capital of the United States in September last.

To my lamented and distinguished predecessor as

president of this Association, the late Dr Austin Flint, belongs the credit of having suggested in his address at the meeting of the Association in 1884, that this congress of eminent scientists, embracing distinguished and renowned representatives of the medical profession from almost every civilized nation of the world, should, through the authority of the American Medical Association, and in the name of the entire medical profession of this country, be invited to hold its ninth meeting in the United States, and that a committee, appointed by this body, to attend the eighth meeting of the Congress at Copenhagen, be charged with the duty of conveying to that meeting this invitation.

Through the personal influence, ability, and diplomatic tact displayed by the judicious gentlemen intrusted with this delicate mission, the invitation was gracefully accepted by our foreign brethren, and Washington City selected as the place of meeting for the Ninth International Congress. It was a source of deep regret to those upon whom the duty devolved of arranging the preliminary work for this important gathering, as well as to the profession at large in this country and abroad, that so many of those who were identified with the movement at its inception should have subsequently disassociated themselves from all connection with the Congress, and thereby limited, in some degree, its influence, importance, and scientific value.

Notwithstanding this defection, however, we have abundant reason to congratulate the medical profession of the United States, and especially the members of this Association, upon the gratifying outcome of this fraternal reunion; and while contemplating with pride the fruits of our labors, we entertain no misgiving, now that a large portion of the scientific work has been submitted to the verdict of the medical world, as to what that verdict will be —*equal if not superior, to the work of any preceding Medical Congress.*

I should be recreant to the dictates of my individual feeling, as well as to that which, I doubt not, animates this entire assembly, were I to omit here any allusion to the particular occasion which at this moment awakens such widespread interest throughout this magnificent city. It is meet that we should avail ourselves of the opportunity to give expression to our sympathy and participate in the common rejoicing which greets this centennial year of her existence. Especially is such a manifestation on the part of this body appropriate, when it is remembered that just one hundred years ago this city of Cincinnati was founded and named by a member of our own profession, Dr. Arthur St. Clair, a native of Scotland, and first Territorial governor of Ohio. This spot, occupied by a fort in 1788, was selected by him as the seat of government, which he named Cincinnati, after the society of Cincinnatus, of which he was a prominent member. From this humble beginning, in the comparatively brief period of one century, like the ancient city of Rome, perched upon its seven hills, and claiming to be the mistress of the world, she now majestically reposes upon her many hills the queen of the West—conscious of her greatness, and justly proud of her achievements in all that constitutes a progressive and perfected civilization; esthetic in art; potential in physics; pre-eminent in science. We, her honored guests, offer the tribute of our admiration and our praise.

At this point, gentlemen, I deem it my duty to revert to a subject which has occasioned me a profound feeling of regret, and which, I trust, may awaken in your minds a responsive sentiment. I refer to the mortifying position in which the Rush monument committee has been placed by the apparent lack of interest and liberality on the part of the medical profession of this country. When we are reminded of the fact that this enterprise was inaugurated under the auspices of this Association, and the committee, authorized to raise, by voluntary subscription, a sufficient fund to proceed with the work, derived its power to do so from this body, it will be seen that we stand committed before the world as the projectors of this undertaking and justly responsible for its execution.

I shall make here no appeal upon the merits of the case, nor do I propose to attempt a euology upon so eminent a citizen and distinguished physician as Benjamin Rush. The record of his life as a patriot, a philosopher, and a physician, stands out as much a part of the history of his country as that of Washington himself.

We owe it, then, to ourselves to recognize the fact that in honoring the memory of such a representative of the medical profession we do honor to ourselves. Let me exhort you, therefore, to avert this impending shadow of reproach which now hovers over the medical men of our land.

All over the capital of our country we find statues erected in memory of statesmen, warriors, philosophers, and patriots, nor has the ever-active and ignoble sentiment of sectional prejudice failed to find there its expression in monumental brass and intended to perpetuate the bitter memories of a fratricidal strife. Let us, as members of a liberal and humane profession, set the example of seeking a higher moral plane to do honor to the man who loved his whole country for his country's sake, who loved science for the sake of science, and who loved mankind through the divine attributes of his nature.

In concluding this address, I desire to offer to you, gentlemen, my congratulations upon the proud and enduring position now occupied by this Association. Resting, as it does, upon the solid foundation of a moral, intellectual, and scientific basis, it has steadily from its birth gained in strength and influence and won for itself the support and approval of our brethren throughout the length and breadth of this country—to-day more powerful, more self-reliant, more progressive, and stronger in the affection of its members than at any former period of its existence. Let us indulge the hope that those of our earlier friends whose allegiance and interests have been temporarily alienated from us may ere long so subordinate the discrepancies of individual judgment and impulses of resentment to the fraternal agencies of a common calling, and the pacific de-

mands of a common science, as to feel justified in once more uniting with us in our efforts to maintain and perpetuate the power, influence, and usefulness of this wise, conservative, and philanthropic organization.

THE PRESIDENT'S ADDRESS TO THE MEDICAL EDITORS' ASSOCIATION, 1888.

Delivered at the Annual Meeting in May, 1888,

BY WILLIAM PORTER, M D.,
OF ST. LOUIS.

Brother Editors:

It was your good pleasure to elect me your President for the year that closes with this session. It has been a year of anxiety and of work; a campaign year, and a year of achievement. I thank you all for the honor which your choice conferred, and for the support which accompanied that choice; yet I have greater satisfaction in remembering what you have done in 1887 to strengthen our National Association and to aid in the affairs of the last Medical Congress.

Through the success which has crowned both of these enterprises, a new dignity has come to the profession of our country, and you, gentlemen, as watchful guardians of what is rightfully yours, will see that the prestige does not depart from those who have so richly earned it.

Two things have been clearly demonstrated during the year that has gone. 1st, the power of the medical press, which has so large a part in this Association. 2d, the value of unity.

It was, to a large extent, through the united efforts of the editors of medical journals here represented, that a once desperate possibility became a glorious certainty. A heavy responsibility was lifted from your shoulders as in last September the world's representatives grasped your hands in hearty approval.

Pleasant as is the retrospect, we must not yet rest upon our oars, satisfied with the progress already made. The current of life bears us not onward but backward, unless continued effort is put forth.

In our land with its ever new development, in our profession with its continued advance, there is no rest for the medical editor, no point of complete attainment. While there has been much to do in the past, there is more to do in the future. While we have had need of each other in the last decade, we have greater necessity for union in years to come.

Fully impressed with our strength and our requirements, I have desired to depart from our usual custom to-night and to discuss with you plans for a stronger organization and questions of importance in our work.

It may be asked, why have we need of a well-organized association? The clouds of '87 have rolled by and the peace of '88 is upon us; all is well.

Gentlemen, let me remind you that the God who made men, made them ambitious, and ambition in our day means rivalry.

I would not attempt to detract from the honor and dignity to which many of our great institutions in the East have attained, nor would I undervalue the untold influence of some of the few medical journals not represented here. We are proud of their work, but we must not forget our part in life's struggle. While the long years of advantage have given to the East the older and stronger universities, the new wealth and energy of the West is giving large promise of a most substantial harvest.

Do not understand me that I would urge strife or sectional jealousy. Not for a moment would I hinder the dove which returns to the grand old ark of our National Society. But though science is cosmopolitan, personal interests may be local. I love my city better than some other city. I esteem my true and tried associates better than those of whom I know but little. I appreciate all honest workers in medical journalism, but I especially want to see the success of those interests here represented. This success we can accomplish if we are willing to labor with honest united effort.

It is one thing, however, to work for individual advancement; it is another, yet not necessarily antagonistic, to do all possible for the largest general result. While it is right that men should form local attachments, and have preference for place and person, it is wrong if in so doing they ignore others who would exercise the same right, and deny that equality which in this land is the birthright of every member of our glorious guild.

I am not an alarmist. I have abiding confidence in the ability of this Association and of the great National body with which we are so closely related, to go onward, to preserve their identity and usefulness, and withal to represent the profession of the United States.

But I fully understand that this position can only be maintained by resolving to stand firm, determined that those interests which are the inheritance of each of us, shall not be narrowed by sectional lines, nor be endangered by personal jealousies. I believe in peace and harmony, but I prefer that peace which is made secure by strength, and that harmony the key-note of which is well secured right. It is well to meet those with whom we have differed should they so desire, but it may be that in advancing half way we should do so in solid column.

The honest wish of every true American physician is that we may have a united profession and that the sharp dividing lines so recently drawn may be obliterated. Let me urge upon you that, in attempting to reach this end, we must not permit a process of absorption to go on which shall reduce one part of our land to the condition of an outlying province, controlled by and tributary to another part.

Rather let us seek to cement the union of professional brotherhood which should everywhere exist, by being true to our own sense of right. Let us honor the proffer of fellowship by extending the hand of self-respect filled with the fruits of patient labor.

If we would grow stronger and more worthy of the trust which is reposed in us by the students of current medical literature, we must guard against two dangers: The first is dissension in our own ranks; the

second, attacks from without. I do not fear the second, if we are careful to avoid the first.

There never was a time when a full understanding with each other and strong, true, aggressive action has been more needed than it is now. If we would prevent this goodly kingdom of ours from becoming a mere dependency, we must stand shoulder to shoulder. The Star of the East has reached its zenith, and "Westward the star of empire takes its way." The light of the former is bright and steady, but the imperial star of modern progress shines for us. Its brilliant rays reach every corner of our land, and its course is not stayed by mountain or river.

But words are vain if they do not call forth action. I would strengthen your faith in your mission, but "faith without works is dead." In this assembly is power; I would arouse it. There is enterprise; let it be stimulated. We have harmony of thought and unity of purpose; let us come closer together in a more definite organization for more effective work.

A strong Association can accomplish much where individual effort may be futile. There are many questions which demand attention. The further advancement of our State and National Associations, legal control of quackery, the International copyright, the questions proposed for discussion to-night, the upholding of our best schools and journals, and the exposure of poor ones; these are some of the matters of vital importance which call for harmonious and well organized action by the medical press of the land.

Do I overestimate the need of organization? Remember that in no other nation in the world are there so many medical journals, so many medical editors, ready to engage in any right enterprise for professional justice and advancement; and yet I do not hesitate to say that in no other country is there so much needless friction, so much misunderstanding of men and their motives.

Is not this, to a large extent, the result of a want of personal knowledge of each other, of a lack of a needed conference and plan?

I would oppose limitation of the utmost freedom of thought or speech, and only urge that which will more firmly unite us, and make more potent such action as we can together endorse. This much we need, and let us have it.

It has been charged that this Association is organized and conducted for purposes other than those of pure journalism.

I need not not use this time and place to refute this slander, but it gives me the opportunity of asserting that if to band together to promote those interests which are just and right and common to us all, to expose fraud in and out of the profession in the North or South, to insist that he who is worthy shall be esteemed whether he comes from the far West or the distant East, to build up our local and State Societies, to further the cause of our National Association; if to unitedly plan to keep these and kindred questions before the profession be a conspiracy, then are we to-night conspirators of the deepest dye.

I glory in such an alliance. Aye, make the circle stronger and larger, till it shall include all who have the oath of editorial knighthood upon their lips and the kingly purpose of right in their hearts.

In you, my seniors in years and experience, have I all confidence that the endurance and judgment which have enabled you to guide others through the wilderness of ignorance in the early stage of our professional history, will not desert you now, when keen adventurers and plausible dogmas are enticing the unwary at every turn.

Upon you, my brothers younger but no less zealous than these, falls the mantle of the leaders who have passed up out of sight. It is your privilege to show yourselves strong yet considerate, aggressive yet gentle, ready each week or month to couch a lance in defense of professional honor, or to speak a word of encouragement and approval to him who needs it.

Indite such thought that men shall catch up the leaves which you scatter far and wide, and give you in return the garland of praise. May your good deeds be known, and all your mistakes forgotten.

ORIGINAL ARTICLES.

A CASE OF HYSTERECTOMY.

Read before the Philadelphia County Medical Society, April 11, 1888.

BY W. W. KEEN, M.D.,

PROFESSOR OF SURGERY IN THE WOMAN'S MEDICAL COLLEGE OF PHILADELPHIA.

The following notes of this case I owe to the courtesy of Dr. John K. Mitchell, her attending physician:

Miss X., æt. 42, American, author. Family history good. Previous personal history good up to about twelve years ago, when she began to suffer in many ways, pointing toward a uterine growth. After two years or more of treatment, Dr. S. Weir Mitchell recommended that the ovaries should be removed. This was done *per vaginam* by Dr. Wm. Goodell in the winter of 1876–77. The tumor diminished, but she has never been free from pain since, chiefly in the left hypochondrium, but extending both up and down. For between two and three years before I first saw her (January 25, 1887), her general health had been steadily growing worse, and the distress in the side increasing to such a degree that she was utterly unable to work, and was wretched alike in body and mind.

Status præsens, Jan. 25, 1887: Slight woman, anæmic, not emaciated, complexion pasty. Heart and lungs normal. On examining abdomen externally a slight abnormal increase in uterus upward and to the left was detected. I supposed it the remnant of the old growth, but the patient did not desire a vaginal exploration made and I was unable to examine it further. There was here no pain or tenderness. An inch below the lowest angle of the ribs on the left side was situated a spot not larger than a quarter of a dollar, tender on pressure, and nearly corresponding in situation with a similar but less defined area of tenderness posteriorly. Most of the distress complained of was vaguely placed hereabouts.

The kidneys could be clearly outlined by percussion, and showed no change from the normal in their areas. The urine was natural, but sometimes contained a slight excess of uric acid formations; bowels always slightly sluggish and the appetite poor; no digestive trouble. She slept very ill, being unable to lie on the back or on the left side, as either position increased the pain in the side, and finally caused a suffocating sensation. It is also greatly aggravated by very slight physical exertion, by sitting long in one position, and by constipation. It is now so constant and severe that Miss X. complains of "losing her grip," of inability to work to good purpose, and of great irritability.

Treatment.—In spite of the previous ovarian and uterine trouble, the situation of the pain seemed to me to be so far from the former site of the ovaries that I was doubtful of their having any share in the present difficulty, though the thought of a nerve caught in the stump left after their removal occurred to me. My treatment was at first directed to the slight lithæmia. Alkaline waters and a regulated diet did little good, and I returned to the view of the implication of a nerve in the cicatrix, and for some weeks passed a galvanic current through the body, with one pole on the posterior tender spot and the other over the one in front. Miss X. was for two or three months much relieved by this, and grew better when a tonic mixture of iron, quinine and strychnia was given. The treatment was interrupted for a short time by a slight attack of acute articular rheumatism in the left foot and ankle. This yielded readily to salicylates, but returned in a less degree once or twice afterward. For a time cannabis indica tincture at night helped her to sleep, but did no permanent good.

Throughout a summer in the country her condition varied, but in October she was decidedly worse—more pain, more mental and physical disability, and, finally, repeated violent neuralgic headaches. The fact that there might be a pressure on a nerve, and possibly on the bowel, from the cicatrix of the old wound, again occurred to me. There was possibly, also, nephritic trouble suspected. In order to determine the facts, a careful examination under ether was advised.

Early in October, 1887, with the assistance of Dr. J. K. Mitchell, I etherized and examined Miss X. with great care. I found the uterus small, the internal measurements 2¼ inches; normal position; freely movable; the posterior wall somewhat thickened. On each side of the uterus a distinct tumor was found about the size of an English walnut. That upon the left side was movable independently of the uterus, and was thought to be the knobbed end of the stump resulting from the previous operation by Dr. Goodell. That upon the right side moved strictly with the uterus and was thought to be a uterine myoma. No other lesion was found in the pelvis. There was nothing detectable in the abdomen in connection with the left kidney, in front of and behind which the chief pain was complained of.

In view of the extremely wretched condition of the patient an exploratory operation was advised.

Operation November 9, 1887, Drs. J. K. Mitchell and W. J. Taylor assisting. An incision was made in the middle line, 5 inches in length, from the pubes upward. As soon as the peritoneal cavity was opened the uterus came into view and the two tumors above described were immediately recognized. They were so intimately incorporated with the body of the uterus that it seemed hopeless to attempt to remove them separately. In view, also, of the other addditional myomata now discovered, and described later with the specimen, it seemed to be the more unwise to leave the uterus in place; accordingly, a Kœberle serre-nœud was applied to the cervix, and the body of the uterus, with its attached tumors, after separation from the peritoneum, was removed by the scissors, the lateral attachments having been first ligated. The peritoneum was now stitched over the stump. Before removing the uterus a careful search had been made in the left hypochondrium, but nothing abnormal was found. The abdominal wound was now closed, first by a continuous suture to the peritoneum, and next by a row of stitches passing through the rest of the abdominal wall. The clamp was separated from the skin by small pads of sublimate dressing on each side, and a large sublimate dressing and a flannel binder were applied.

Dr. George Dock kindly examined the specimen, and reported as follows:

The specimen consists of the body of the uterus with 3.5 cm. of the right Fallopian tube and corresponding parts of the round and the broad ligaments, and 1 cm. of the left Fallopian tube, the round and the broad ligaments on that side being cut off close to the uterus and the tumors described below. The remains of the ovarian ligaments cannot be made out.

The fundus is of average size (nullipara), and appears to be cut off just below the internal os. The anterior surface is of normal curve. About the middle of the right border is a subserous fibromyoma, the size of a small bean. The posterior surface bulges excessively, the projection being due to the presence of a mural fibroid tumor which makes up most of the bulk of that part of the organ. The cavity of the uterus (fundus) is flat from before backward, and is triangular in outline, the opening of the tubes being in the two upper angles, the os internum in the lower. The sides of the angles measure: right, 27 mm.; left, 22 mm.; upper, 25 mm. The right upper angle is at a higher level than the left, the wall of the uterus being relatively thinner on that side. The surface of the cavity is smooth, and presents three small polypoid growths, two on the anterior, one on the posterior surface. The anterior wall is 8 mm. in thickness, the posterior 2 cm.

The tubes show nothing abnormal. To the right of the fundus in front of its transverse axis, and 1 cm. below the level of the insertion of the round ligament, is a tumor the size of a walnut ($36 \times 26 \times 26$ mm.). It lies in the angle formed by the broad ligament and the uterus, close to the latter, being separated by loose connective tissue and blood-vessels. It is covered by peritoneum, the greater part of which is that forming the anterior fold of the broad ligament.

The surface of this tumor is irregular. On section

it is hard, creaks under the knife, the cut surface is dark gray in color. Around the periphery are whitish fibrous masses and extreme calcification.

Microscopic examination of this growth shows it to be a myoma which has undergone partial necrosis, with pigmentation and calcification.

To the left of the fundus, behind the transverse axis, is another tumor, slightly smaller than the one just mentioned (33 × 26 × 28 mm.). Its upper surface is on a level with the fundus. Its nodular surface is covered with peritoneum, and it is separated from the uterus at a distance of 5 mm. by loose connective tissue in which lie two smaller tumors. On section it shows a lobular structure of firm white tissue (fibromyoma). In the upper part are masses of hard, calcareous matter (calcium carbonate). The two smaller tumors in the connective tissue are myomata.

For the next three days the patient complained greatly of pain, which was relieved by considerable doses of morphia. It should, however, here be stated that she bore pain badly. Her highest temperature was 99.7° F., and the normal was reached at the end of the third day. At this time, of her own accord, she declined any further morphia. The catheter had to be used for the first three days. With the exception of a rather obstinate constipation, which caused considerable abdominal pain and sleeplessness, which last was relieved by cannabis indica, her later history was uneventful, saving in one particular. The wire was tightened to the utmost limit in the course of the week after the operation, but the stump did not slough nor did the clamp become loose. As the clamp was producing ulceration of the skin, it was removed December 2. The wound, at this time, was reduced to a tubular sinus leading down to the stump. The last slough from the stump did not come away until Dec. 26; wound completely healed Jan. 6, 1888.

Since that date the patient has been absolutely well, physically and mentally. She eats and sleeps well, and takes active exercise with more satisfaction than at any time during the last twelve years; in fact, she is thoroughly restored to good health.

To complete her history, I will add the examination of her eyes by Dr. De Schweinitz: "Oval discs, rather too gray; retinal haze, both venous and arterial; lymph sheaths distended. This low grade of retinal disturbance is, I think, purely accommodative. There is a high degree of insufficiency of the internal recti." He prescribed the proper glasses.

REMARKS.—The removal of the ovaries by Dr. Goodell, which was done *per vaginam*, was one of the earliest of such operations done in this country. It reflects no little credit upon his skill that, in so contracted a vagina, he was able so successfully to remove the ovaries. Although this operation relieved her temporarily from pain, it proved of no permanent benefit. Her pains returned and, though located differently, grew worse and worse, so that, finally, all mental exertion, and all physical exertion as well, became greatly hampered. In fact, writing, which was her vocation, became impossible. She was willing to undergo any operation whatsoever which held out any chance of relief. She preferred to die rather than to live in such wretchedness.

The diagnosis was very obscure. What the meaning of the pain in the hypochondrium was, I could only surmise. The two tumors on each side of the uterus were believed to be, one a uterine myoma, and the other an enlargement on the stump following Dr. Goodell's operation.

An examination of the specimen shows, as to the first, that I was right. But no enlargement had taken place on the pedicle on the left side; the tumor being one of a number of myomata developed in connection with the uterus. Its situation at the cornu uteri very naturally misled me.

No other operation than hysterectomy would, I think, have been advisable. Its performance was easy, and its results have been perfect.

Why the removal of the uterus, with its attached myomata, should get rid of pain in the hypochondrium, I am unable to say. To say that it was reflex pain is simply to express our ignorance in different words. Certain it is, however, that the removal of the entire internal organs of generation has been followed with the happiest results, whereas the removal of the ovaries alone gave but little relief.

I have deemed it important to report the case, in consequence of the recent question as to the results of complete and incomplete removal of the tubes with the possibility of the development of tumors on the stumps after incomplete removal of the tubes. My first impression, upon examining the specimen itself, was that the tumors were such knobby stumps, but after section and microscopic examination by Dr. Dock, this impression was seen to be erroneous.

A CASE OF HÆMOTHORAX FOLLOWING AN INCISED WOUND OF THE THORACIC WALL.

Read before the Chicago Medical Society, January 3, 1888,

BY NORVAL H. PIERCE, M.D.,
OF CHICAGO.

The patient whom I exhibit to you is 19 years old, of healthy parents, and was six months ago in good health.

On July 13, 1887, at 3.30 P.M., while cutting a piece of wood with the stick adjusted against his chest, he accidentally stabbed himself in the third intercostal space, half an inch to the left of the right parasternal line. The knife, which I hold in my hand, presents a sharp blade two inches in length, and half an inch in breadth. After the accident he walked to a neighboring surgery, thinking the wounds of little consequence; but when he arrived the loss of blood externally was sufficient to saturate his clothes, and caused syncope.

The doctor prognosticated death in a few hours, and summoned the patrol wagon. At 7 P.M., or 3½ hours after the stabbing, I was summoned. He had received no treatment up to this time. I found the man in the condition of one who has sustained a very serious loss of blood—pale features, pinched, eyes sunken, and pupils widely dilated, surface cold and clammy, impaired hearing, pulse nearly imperceptible and very rapid, respiration sighing. There was very slight external bleeding at the wound, which

was about an inch in length. From an inch above the sternum to the lower border of the liver the right side was dull, but at this time the liver was not displaced. No blood was expectorated. I closed the wound antiseptically, ordered an ice-bag for the chest, warm bottles to the lower extremeties, head lowered, whisky, half ounce every forty-five minutes, together with ergot, very little liquids, and absolute rest.

For several days after this his life hung in the balance. The pulse improved gradually, but the anæmia persisted, dyspnœa arose, together with great restlessness and troublesome insomnia, and the right pleural cavity remained flat on percussion, the lower border of the liver gradually descended and the heart was displaced to the left, indicating that the hæmorrhage was slowly progressing. At this time the advisability of enlarging the wound and taking up the bleeding vessel, or searing the lung with Paquelin's cautery, was entertained. But such a procedure entailed great risk and no small amount of uncertainty, the location of the bleeding point being unsettled. These facts, together with that of the patient holding his own, even in a low condition, deterred operating.

Because of increasing dyspnœa I consulted with Dr. Fenger as to the advisability of aspirating, under the existing circumstances, and on July 27 a gallon of dark colored blood was drawn away. This did not cause the dulness over the right thoracic area to disappear, but relieved the difficult breathing and lessened the restlessness and insomnia.

On August 20 I again aspirated, the lower border of the liver being within an inch of the iliac crest. Another gallon was drawn away. Under the microscope the white corpuscles were not greatly increased. Up to this time the temperature had ranged from 100° to 101° F. Afterwards it fell to normal once or twice, but generally the thermometer registered 100° F.

On September 5 diarrhœa set in, and lasted two or three days. Cough developed soon after, with very offensive expectoration. The liver dulness was gradually descending and extreme dyspnœa began. As the fluid in the pleural cavity now contained a marked increase in white corpuscles, I decided to perform the radical operation of empyema. On September 23 this was attempted. At this time there was a marked lowering of his general condition. At the time of the incision I purposed removing one or more ribs, but on account of the alarming manner in which he took the ether we thought it best to be as expeditious as possible. The tissues of the seventh intercostal were therefore simply incised, about a gallon of fluid allowed to escape, and the opening plugged with iodoform gauze. At the end the patient was in a state of collapse, brought on, I believe, by the too sudden escape of the fluid. He rallied, however, and the next day a tube was inserted and the cavity washed with a saturated solution of boracic acid at 100° F., which was repeated every second day thereafter. Fever and cough disappeared on the second day. The washings grew less and less colored, and in a few days the tube was removed.

The case sets forth not so much the innate goodness of conservative surgery, as it does the great tolerance of the thoracic cavity of effusions nearly if not quite equal to that of the abdomen. It also shows what a great quantity of blood may be lost without death, over three gallons being taken away in as many tempos. It likewise shows that the wound from which such a hæmorrhage could issue is capable of spontaneous arrest.

As regards the place for the incision, I would say the seventh intercostal space is too low, as after the first week the movements of the diaphragm interfered with the drainage tube.

As you may see, this slight cut an inch in length, with its attendant disasters, has left its mark. The right shoulder is depressed one inch. The external circumference of the right side is less than that of the left.

MEDICAL PROGRESS.

Mediate Auscultation.—Dr. James K. Crook says: I am not in favor of a multiplication of instruments in the practice of our art. We should make it our aim to be enabled to employ the implements with which nature has provided us in as extended a field as possible, as they are always at hand and ready for use. The artificial pleximeter and hammer, for example, I would discard entirely, as they are in nowise superior, and in some respects inferior, to the fingers of the two hands. But we have in the stethoscope a useful and, in my opinion, oftentimes an indispensable aid in diagnosis; and I would urge every one who proposes to treat diseases of the thoracic viscera to supply himself with one.

The binaural stethoscope has seemed to me to possess the following advantages: 1. It is far more convenient than the uniaural instrument, as we can employ it while standing or sitting erect in a natural and unconstrained position. 2. As the chest-piece is immediately in front of the face, we may keep it under constant observation and shift its position from point to point with the greatest facility. 3. By directing the patient to hold the distal extremity of the instrument between his fingers, we may have the free use of both hands for manipulation, as in performing auscultatory percussion, etc. 4. By closing both ears it excludes all foreign noises. For the foregoing reasons I invariably employ this instrument, and recommend it to students of physical diagnosis. Discretion should be used in the selection of a stethoscope. I fancy that many of the objections to the Camman instrument have arisen from the fact that the instrument employed was not at all suited to the auscultator's ears. Always see that the aural extremities of the instrument are arched to correspond with the external auditory canal. Do not have the ear-pieces too large, or, on the other hand, too small to fit the meatus of the ear. The spring or rubber band which connects the ear-pieces should be just tight enough to allow the ear tips to adapt themselves

without discomfort to the ear. Different heads are of different diameters, and an instrument which would suit one would perhaps be totally unfit for another. See that your stethoscope is supplied with three chest-pieces—a narrow, hard rubber piece for cardiac auscultation, a wide-brimmed piece, also of hard rubber, for the lungs, and a soft rubber piece, which has an occasional application in very thin patients with many bony prominences.

Personally, I find the stethoscope of special importance in the following cases:

1. In auscultation of the veins and arteries of the neck. The adventitious sounds produced in these vessels, as, for example, in chlorosis, are often very circumscribed, sometimes being limited to a small space on one side of the neck. I have been able to detect these sounds and to map out their area with the stethoscope after they had altogether escaped the attention of the unaided ear. In auscultating this region, direct the patient to cease breathing temporarily, as the respiratory sounds may give rise to confusion, and do not make too much pressure over the large arteries, as it is sometimes possible to generate an artificial murmur in this way. The stethoscope is also of occasional service in making out and locating obstructions in the larynx and trachea.

2. In auscultation of the heart. A cardiac murmur can be heard with great distinctness by the unaided ear; but I believe it to be well-nigh impossible in many cases to locate it or trace it to its point of origin by this means. It often happens that two or more murmurs are present at the same time in the heart, and it requires the nicest scrutiny to analyze them and refer them to their points of development. In immediate auscultation, the entire side of the head comes in contact with, and receives the impact of, the cardiac impulse as well as the ear. There can be no doubt that the angle of the jaw, the temple, and the zygomatic process may serve as conductors of sound, so that in immediate auscultation the sounds heard correspond, not to a space as large as the ear, but as large as the side of the head. This view was advanced by Laennec, and has not been concurred in by many subsequent observers, but experience leads me to believe in its correctness. Sometimes, also, the heart is acting so irregularly that we cannot even distinguish the systolic sound (the cardinal point in cardiac examinations) by auscultation. In using the stethoscope, however, we have the præcordial area directly before the eye, and we can thus often *see* the impulse of the heart against the chest, which corresponds in rhythm with the first sound. In females, aside from the question of decorum, it is frequently almost a mechanical impossibility to adapt the ear accurately to certain portions of the præcordial region. Imagine, for example, the difficulty of applying the ear to the mitral area of a female with a largely developed pendulous breast. We cannot avoid using the stethoscope here if we wish to make anything like an accurate diagnosis.

3. In determining the size, and sometimes the number, of pulmonary cavities. By a careful adjustment of the chest-piece (the narrow one should generally be used here), we can often arrive at a very fair idea of the size of excavations in the lungs and sometimes even of their number. Auscultatory percussion is useful in such cases. The patient may be directed to hold the chest-piece *in situ*, which leaves both hands of the auscultator free. Percussion may then be made in the usual manner with a radius of half an inch or an inch from the rim of the stethoscope. By practice, the shades of difference in the percussion note may be appreciated with far greater distinctness by this means than through the medium of the ear. I feel assured that all who give this method a fair trial will find it far superior to the old-fashioned method of Drs. Camman and Clark with the one-ear wooden percussion stethoscope.

In addition to the foregoing you will sometimes find other conditions in which the stethoscope will be useful; as, for example, in skin diseases and in contagious diseases generally, in which you may have occasion to auscultate the lungs or heart. The advantage of this instrument in an examination for the fœtal heart sounds needs no urging.

Except as indicated, I seldom use the stethoscope for pulmonary auscultation. It is of little special use in examining the posterior aspect of the thorax, for the reason that the physical signs of disease in this region, as, for example, in bronchitis, emphysema, asthma, pneumonia, etc., are not apt to be circumscribed, and the unaided ear has the advantage of being more rapid. This is a point of special importance in weak and debilitated subjects, whom we frequently have to support in bed while this region is being examined.—*The Post-Graduate*, January, 1888.

TREATMENT OF GONORRHŒA BY ANTROPHORES.—DR. HUGO LOHNSTEIN, of Professor Zuelzer's polyclinic in Berlin, has found, as the result of observations on ninety-three cases, that gonorrhœa, both in its acute and chronic form, usually yields more readily to systematic treatment by a kind of medicated soluble bougies called *antrophores* than to other methods. These antrophores are made by Herr Stephan, a pharmacist in Treuen, Saxony, and consist of a nickel-plated metallic spiral containing a soft medicated material, the basis of which is gelatine and glycerin—the same kind of thing, in fact, as the hektograph and other "graph" compositions are made of. Before the introduction of the bougie the urethra is well syringed out by a Zuelzer's apparatus with a 2 per cent. solution of boracic acid. Regarding this Dr. Lohnstein remarks that the mere passing of urine by the patient is quite insufficient to cleanse the passage from secretion, as anyone may easily convince himself by an examination with the endoscope. As a rule, a single bougie is sufficient during twenty-four hours. Indeed, when the introduction was repeated several times a day no better result was obtained but, on the contrary, the urethra appeared to be irritated by the instrument. These bougies must be differently applied in acute and chronic cases. In an acute gonorrhœa, where the prostatic portion of the urethra is not affected, the bougie should not be introduced into it, the surgeon being able to tell when the prostate is reached by the

greater resistance caused by the circular muscular fibres. In chronic gleet, where the prostatic portion is affected, the bougie should be made to enter it, but ought always to be kept from entering the bladder, which may bring on strangury and even cystitis. The surgeon guards against this by asking the patient to tell him when he feels as if the instrument were in the bowel. He then knows that it is in the prostatic portion. The medicament mostly used by Dr. Lohnstein is thallin. For the first and second day bougies containing 2 per cent. of this substance are employed; even this strength occasionally produces a sensation of burning. On the third and subsequent days a bougie with 5 per cent. of thallin can usually be borne. It is not found advisable to allow patients to introduce the bougies themselves, for they are liable to set up hæmorrhage and to push the instrument into the bladder. In an acute case the thick secretion is usually changed by the third day into a thinner and clearer fluid; during the next few days the quantity of this gradually diminishes, and the secretion has generally entirely ceased in from eight to fourteen days' treatment. Complications such as are produced by injections very rarely occurred; epididymitis never; cystitis in two cases only, and in these it was probably due to faulty introduction of the bougies. Several cases were cured that had resisted other measures. The most difficult class of cases to treat is, of course, the chronic form. Here it was often found that, though the secretion could be greatly reduced, any attempt to lengthen the intervals of the introduction of the bougies was liable to be followed by a return to the original condition. Where the prostate and its ejaculatory ducts are affected, it is often necessary to have recourse to bougies of different kinds—*e. g.*, zinc, tannin, rhatany, nitrate of silver, quinine, or sulpho-ichthyolate of ammonium. Of course, where, instead of the mucous membrane generally being inflamed, there is a small ulcerated patch, these bougies are useless, and the endoscope must be employed as a guide to special local treatment.—*The Lancet*, March 24, 1888.

Acetic Acid and Strychnine as an Ecbolic.—Mr. G. S. Mahomed, of Bournemouth, says:

Since Dr. Grigg called attention to the value of vinegar as ecbolic, I have frequently used it for that purpose. And I have also found that four drops of the strong acetic acid (representing nearly half a drachm of vinegar) combined with strychnine has been successful in bringing about contractions of the uterus after ergot had failed. In one noteworthy case where in a very weak and anæmic woman the pains, after continuing feebly for a day or two, seemed to be leaving her, and ergot had been exhibited (the waters having broken), I found acetic acid and strychnine produce sharp and effectual pains.

The same thought, therefore, occurred to me as to Dr. Francis, of the possibly good results of combining it with ergot, and, in addition, observing that acetic acid could extract the active principle from colchicum and ipecacuanha, I asked Messrs. Corbyn to make a preparation of ergot, using acetic acid as a menstruum, with a standard surplus of free acid. In a short time I received from them two samples, one of ergot extracted by acetic acid, of which a fluid drachm represented 60 grains of ergot with ten minims of free acid; the other, an alcoholic extract of ergot, which also represented 60 grains of ergot and 10 minims of free acid in each drachm. Both preparations had the color of the ordinary extracts, but the acetic acid frothed when shaken, which, of course, the alcoholic extract did not do. The acetic acid process should be more economical than the spirit method.

In a case where there was retained discharge after labor I gave some of this extract, and when the medicine was exhausted wrote a prescription for a similar dose of *B. P.* extract, to which I also added some bromide of potash, which is stated to aid the involution of the womb. The case was still unrelieved on my next visit, the uterus being obviously distended, so, after syringing out the cavity, I told them to have the medicine made up again, when the patient said, "Oh, sir, the medicine you gave me at first brought away something every time, but this medicine has done no good." This seems like a comparative test in favor of the acetic extract.

In a case of flooding, due to a large fibroid, I found that 20 minims injected deeply into the buttock gave rise to no local irritation, and there was no bleeding the night following, but there needs further experience before attributing this result to the drug. Ergotine discs did not always control it. —*British Medical Journal*, April 7, 1888.

Dermatoses following Mental Shock.—Dr. Dubois-Havenith, writing in *La Clinique*, adds some further instances of dermatoses following mental shock to the case of purpura hæmorrhagica recently described by Professor E. de Smet. 1. An unmarried lady who had been present when a man armed with a spade violently attacked another man was much upset by the sight, and did not regain her accustomed composure for some days. Three weeks later bullæ presented themselves on different parts of the body, and before long the entire cutaneous surface was covered with an eruption, having the characters of foliaceous pemphigus, accompanied by incessant pruritus. Arsenic, quinine, and other remedies exercised but little effect, or at least only a temporary one for the patient succumbed after four years in a state of marasmus. 2. A little girl of 10 was with difficulty saved from a burning house. From that time her appetite became bad, and she was haunted by constant nightmares and visions of houses on fire. A month afterwards a pemphigoid eruption made its appearance on the nose. It spread to the mouth and then disappeared. Shortly, however, it again manifested itself, covering a large part of the body. Iron and quinine appeared to be of but little service, for in nine months's time the eruption was as copious as ever. Two or three drops of Fowler's solution of arsenic three times a day soon worked a marvellous improvement, which it was evident was really due to the arsenic, for twice when the medicine was intermitted for a time the eruption returned. 3. A mar-

ried woman had a quarrel with her husband, who struck her on the cheek with a key. Four days afterwards an eruption came out on the wrists, the hands, and the feet. This eruption had the characters of Hebra's multiform uxudative erythema, and was accompanied by intense itching. On the lips there was a vesicular, tumefied eruption, and patches on the tongue. The whole disappeared in about three weeks. —*Lancet*, April 14, 1888.

DETECTION OF COTTON-SEED OIL IN OLIVE OIL.—ERNEST MILLIAN, of Marseilles gives the following as a ready method of detecting cotton-seed oil in olive oil: It is based on the power of reducing the fatty acids of cotton-seed oil. In a porcelain dish holding about 1000 cc., heat 15 cc. of the oil to be examined, to 110° C. Then, the heat being continued, turn slowly into the oil a mixture of 15 cc. of a solution of caustic soda in distilled water, at 40° Baumé, and 15 cc. of alcohol at 92°. After the mass has became homogeneous by ebullition, indicating complete saponification, add drop by drop, so as not to cool the mass nor form lumps, about 500 cc. of distilled water. After boiling for a few minutes the fatty acid may be separated by means of a 1:10 solution of pure sulphuric acid. When the separation is complete, and the sulphuric acid is slightly in excess, collect 5 cc. of the fatty acids with a silver spoon, and place in a test-tube—one about 3 cm. in diameter and 12 cm. long. Now add 20 cc. of alcohol at 92°, and heat slightly on a water-bath to dissolve the fatty acids. These being dissolved, pour in 2 cc. of a solution of pure nitrate of silver (30 grams to 100 cc. of distilled water), replace the tube on the water-bath, and heat until about a third of the mass is evaporated; take the test-tube from the bath, and the operation is over.

Whatever be the source of olive oil its fatty acids remain unaltered if the oil is pure; if, on the contrary, the oil contain cotton-seed oil, even as little as 1 per cent., there is a reduction, and the metallic silver set free gives a black color to the fatty acids of the mixture as they rise to the surface.—*Nouveaux Remedès*, No. 5, 1888.

PERCHLORIDE OF IRON AND MILK IN DIPHTHERIA.—M. MOHAMMED BEN-NEKKACH, of Inkermann, reported to the Association Française pour l'Avancement des Sciences on March 30, that he had treated 21 patients with diphtheria with perchloride of iron and milk, with only one death, in the case of an infant six months old. Among the other patients were two adults. All the patients were treated from the beginning of the disease, before the period of asphyxia. Independently of the 21 there were six other patients, that could not be treated properly on account of indocility, or in which the treatment was not properly carried out, or because treatment was begun too late.

In all the cases that recovered, and most of them were severe, the iron was given in doses of 25 to 30 gtts. in a glass of water (the solution being fresh for each dose). The quantity of milk given was a litre a day. As adjuvants were prescribed emetics and painting the pharynx three times a day with the iron. —*Semaine Médicale*, April 4, 1888.

ACETOPHENIDINE.—M. GUERORGUIEWSKY has employed acetophenidine instead of antipyrin. It is a crystalline grey powder, insipid and inodorous, derived from phenol; it is soluble only in 20 parts of alcohol, and is eliminated by the urine, wherein it can be detected by the red coloration with perchloride of iron. In typhoid fever, tuberculosis, erysipelas and pneumonia, in doses of from 15 to 30 centigrams, he found it to act as an antipyretic in from twenty to forty minutes after injection; the pulse and respiration diminishing in frequency, and sweating being induced. It also relieved pain, but doses of 50 or 60 centigrams are required to effect this end, as in migraine, cephalalgia, and tabetic pains. It never upset the stomach, or modified any of the other functions of the body; in this respect it claims to be superior to antipyrin.—*The Lancet*, March 24, 1888.

PERRO'S METHOD OF REDUCING STRANGULATED INGUINAL HERNIA.—G. S. PERRO uses the following method: After the pelvis has been raised on a pillow, and the thigh flexed and abducted, the operator grasps the scrotum and the hernial tumor, bends it slightly against the wall of the abdomen, and presses upon it in such a way that the index finger of the right hand is carried into the inguinal canal, and in the direction of the horizontal ramus of the pubes by a turning and boring motion; in a short time the strangulated part slips back into the abdominal cavity, and the other part follows. By this method Perro has succeeded in reducing six cases of strangulated hernia, after his colleagues had spent from twelve to thirty hours in vain attempts at reduction.—*Centralblatt für Chirurgie*, No. 12, 1888.

ACETANILIDE-MONOBROMO.—MESSRS. BURGOYNE, BURBRIDGES & Co., have prepared a combination of antifebrine or acetanilide with bromine, which it is suggested may prove useful in facial neuralgia when the pains in the head are linked to nerve alterations; also in rheumatic, muscular, and articular pains. The name given to the compound is acetanilide-monobromo, and its formula is $(C_6H_4BrN<^{CO_1CH_3}_{H})$. —*Lancet*, April 14, 1888.

INFUSION OF DIGITALIS IN PNEUMONIA.—PROF. PETRUSCO, of Bucharest, reports the very successful treatment of 142 cases of pneumonia by large doses of the infusion of digitalis—from one to two drams of the leaves in infusion in the twenty-four hours. In no case were any evil effects from these large doses observed. While it does not appear that the disease was materially shortened, the mortality was much below the average—the death-rate being only one per cent.—*Weekly Med. Review*, April 21, 1888.

A PASTE FOR PEMPHIGUS.—UNNA recommends a paste made of equal parts of linseed oil, lime-water, oxide of zinc, and chalk, which is said to work admirably in drying up the new blebs, and preventing their return.

THE
Journal of the American Medical Association.
PUBLISHED WEEKLY.

THE EDITOR OF THIS JOURNAL would be glad to receive any items of general interest in regard to local events, or matters that it is desirable to call to the attention of the profession. Letters written for publication or containing items of information should be accompanied by the writer's full name and address, although not necessarily to be published. All communications in regard to editorial work should be addressed to the Editor.

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SATURDAY, MAY 12, 1888.

THE PRESIDENT'S ADDRESS.

The able Address on "The Mission of the American Medical Association," delivered by PRESIDENT GARNETT, on Tuesday, should be read carefully, and especially by the teachers in those medical schools that have neither requirements for admission to their classes, nor systematic graded courses of instruction. The opinion that students of medicine must have a good preliminary education before entering a medical school, and that public interest, and the welfare of the individual student as well as of the profession as a whole demand systematic graded courses of instruction is becoming more general each year, and will bear good fruit when the colleges that are still out of line find that it is to their interest to put up the bars both for entrance and for graduation.

It is useless to enter into any argument with those that assert that the American Medical Association has accomplished nothing in the way of medical reform. The Association has always stood in the van of medical reform and high medical education, and high requirements for admission to medical study. Obviously, however, not being a legislative or judiciary or police body it could go no farther than the making of wise suggestions—it has no compelling power over the colleges and teachers whose chief aim is the students' fees, regardless of whether they be qualified by nature or education for entering a noble profession. Under our system of government the compelling and police powers in such matters must be vested in the medical boards created by the individual States. The effect of the passage of medical practice acts and the creation of boards of health and of medical examiners by different States has been felt in a large number of colleges requiring preliminary education for the study of medicine, longer terms of medical study, and graded courses have increased markedly during the last six or seven years, and the good work still goes on. And even the colleges that had not sufficient regard for their reputation and for the welfare of the profession to raise their requirements, have, in some instances, shown that they recognized the justice of the requirements of State boards by specious and evasive announcements of new requirements—seemingly afraid that they would lose patronage, on one hand, if proper requirements were made, and that, on the other hand, some of their graduates would fail of admission to practice in certain States if improper requirements were shown to exist.

Dr. Garnett has a few words for the colleges that claim that the colleges should not be held responsible for graduating illiterate and incompetent students; that preceptors are supposed to send to the colleges only such students as are fitted for the study of medicine; and he is justly suspicious of the colleges that simply announce that certificates of educational acquirements are required of all students before matriculating. And he might have added some words regarding those institutions that make some such announcement as the following: Certain States having passed laws requiring preliminary examinations, in order that students from this college may not be embarrassed the Faculty will grant preliminary examinations to such as intend to practice in the States requiring such examinations. Can such announcements be regarded otherwise than as an evasion of the regulations of certain State boards?

The propositions suggested by the President do not require elaboration nor discussion. While the second may at first seem harsh and impracticable, it is at least as fair for the one as for another.

NE SUTOR ULTRA CREPIDAM.

The most important work in midwifery performed by the Chicago Gynæcological Society, during the brief period of its active existence, has consisted in the frequent enunciation of the Semmelweiss doctrine of the nature and prevention of puerperal fever, and the repeated discussion of the method of abdominal palpation in obstetrical diagnosis. The Society is to be congratulated upon the faithful execution of a

duty of vital significance both to the profession and to the community. On general principles, one would naturally have thought that the numerous essays on both subjects were works of supererogation and unworthy of presentation before a body claiming to be constituted by specially qualified practitioners. So much of the same tenor has been ably and authoritatively written upon both topics within recent years. Moreover, absolute unanimity of all opinion entitled to highest consideration has existed for a long period.

But the outspoken skepticism, both as to the nature of puerperal fever, as expounded by Semmelweiss, and as to the value of abdominal palpation, displayed in the discussion of these essays, demonstrates their timely character, while it also suggests the melancholy fact that medical men do not always read so much, nor so attentively, as might reasonably be expected of members of a learned profession with a magnificent literature.

It was urged by a very small minority of the members of the Society that formal indorsement of the view, that vaginal examination of the parturient woman ought to be discouraged, should be withheld upon the ground of possible medico-legal complications; that papers suggesting the notion of the responsibility of the physician or nurse in case of puerperal fever, must be suppressed for the same reason —the danger of suits for malpractice.

Here we have verily an old foe not even with a new face—an application of the doctrine of expediency at once curious and amusing, if the importance of the subject did not render the matter pathetic. The vital moment of the issue is sufficient apology for making this local and relatively trivial protest the text of an editorial note.

It is perhaps needless to say that the expediency of the Semmelweiss doctrine is wholly irrelevant to the discussion. The truth or falsity of the theory only concerns us. In passing, it may be remarked that the plea of self-interest has never been very popular among medical men—probably on account of the native nobility of the science; possibly, also, because it is almost always the sign of a weak cause. Of course, the belief that every case of puerperal fever arises from the resorption of decomposing animal organic matter through lesions in the genital tract, and that the *materies peccans* is invariably introduced from without, throws tremendous responsibility upon physician and nurse. In the concrete case of puerperal fever, provided the control of the patient has been entirely given up to physician and nurse, one or other—or both—are responsible for the disease. The woman is either infected directly by contact through the fingers, instruments, and the like, or indirectly by the cocci within the vagina, on the skin surface, or in the clothing. The doctrine is undoubtedly a harsh and unpleasant one for the attendants, and it is only "the[1] hard evidence of facts, *la brutalité des faits*, which forces us to accept this theory." Our predecessors "were helpless in the prevention of puerperal fever, but they never had a sleepless night from remorse." The Semmelweiss theory, supported by "irresistible facts contributed by physicians in all parts of the world," constitutes an integral portion of medical science, and is no longer a legitimate subject for discussion. The statistics of Leopold, Freund, Credé, Carl Braun, Tarnier, Richardson, Garrigues, are interesting and valuable, but they are not necessary to the establishment of the fact. That was fully accomplished long since.

Is it not, then, remarkable that the *Medical Standard*, of October, 1887, takes up the gauntlet in an editorial entitled "Medico-legal Dangers from too Positive Assertions." From the general proposition, "Physicians cannot be too careful in stating a favorite hypothesis as an established truth of science,' one cannot withhold his assent, although one may fail to perceive the necessity for the repetition of a trite platitude. But in the case in question, the plea of self-interest was urged against the indorsement—entirely superfluous, it is true—by the Society of "an established truth of science" and not of "a favorite hypothesis." The writer of the note was unhappy in the selection of his illustration—that is perfectly plain. Was he also ignorant of the present state of our knowledge respecting puerperal fever? If the note is the expression of irresponsible opinion, as it seems to be, we beg to suggest the fitness of imitating the sobriety of the French cobbler: "A Parisian bootmaker," the chronicle tells us, "on being asked his opinion of the respective merits of Turenne and the Grand Condé on the same stricken field, replied: 'I made the boots of both gentlemen; as far as boots go there is not a pin to choose between them; beyond that I cannot go, for it lies outside of my profession.'"

Ne sutor ultra crepidam.

THEINE AS ANALGESIC.

A contribution to the therapeutics of pain by an intelligent worker may be always welcomed as a step forwards in the treatment of disease. Such is a little book that has recently appeared from the well-known pen of DR. THOMAS J. MAYS, of Philadelphia:

[1] Kucher.

"A physiological Contribution to the Therapeutics of Pain," as he calls it, being a reprint of a continued article that appeared in the *Polyclinic*, from last September to February, 1888. Dr. Mays' first contribution to the therapeutic action of theine appeared two years and a half ago, at which time he thought that what was sold as theine was actually made from tea. Since that time he has obtained pure specimens, and revised all his former work on the subject.

Theine and caffeine are alike in first affecting the anterior extremities of frogs, and both diminish respiration and cause hyperæsthesia during the latter (later?) stage of the poisoning, although the supersensitiveness is much more marked in theine than in caffeine. They differ in the following respects: Theine principally effects sensation, while caffeine does not; theine produces spontaneous spasms and convulsions, while caffeine does not until very late in the stage of poisoning; theine impairs the nasal reflex early in the poisoning process, while caffeine does not, if at all, until the very last stage; the lethal dose of theine is larger than that of caffeine. These differences are sufficient to show that theine and caffeine are not identical in physiological action, though chemists describe them as being the same chemically—which it is not at least fair to question until further analyses are made; for while it by no means follows that two isomeric substances have similar properties, it may be doubted if two isomeric, or even metameric bodies would have such different physiological actions. Of the purity of the caffeine and theine used by Dr. Mays, it is sufficient to say that precisely identical results were obtained from two separate manufactures of both alkaloids by Merck, of Darmstadt, and from specimens made by Mr. Wm. C. Harris, a Philadelphia chemist. This much by way of explanation of a number of supposed failures of theine in the hands of other physicians after the publication of Dr. Mays' first article.

The physiological action of theine on man, as deduced from a number of experiments by Dr. Mays, may be summed up as follows: Dose from .2 to .5 grain. Numbness of the arm and hand below the seat of injection—"a feeling as if the hand had been steeped in a solution of carbolic acid;" a feeling of coldness and an occasional disturbance of temperature of the member under its influence. A slight reduction in the pulse rate, and no intoxication of the brain. No impairment of motion. The anæsthesia begins in a very few minutes, and is much more marked in some individuals than in others. A relief to the sensation of fatigue. Temperature disturbance not regular. In four cases in which the temperature was taken, the hand that showed the greatest depression of temperature was least anæsthetized. The psychic disturbances caused by deep injections in Dr. Castle's experiments upon himself (*Medical News*, Dec. 15, 1885) were probably caused by the introduction of the solution directly into a vessel, since Dr. Mays, even with five times the quantity used by Dr. Castle, has never observed any phenomena of the kind. It may be said, then that theine: 1. Has a special affinity for the nerves of sensation. 2. It produces anæsthesia when administered subcutaneously. 3. Its anæsthetic action is confined below the seat of its injection, *i.e.*, its influence extends from the centre to the periphery, and not in the opposite direction.

Its physiological action, then, shows that in theine we have an agent that paralyzes sensation without affecting motion, and that this effect is certain and without injury to any part of the body, even in large doses. According to Dr. Mays, in order to obtain the full effect of theine it is not necessary to inject it deeper than immediately below the skin, and Dr. Castle's experience with it shows that deep injections may cause unpleasant symptoms. Dr. Mays says that the analgesic action of the drug is very prompt, and when a single dose fails to act favorably, it is advisable to increase, even if this has to be done to a large extent—as much as gr. 2.5 or more. He has seen no prolonged irritation, and no inflammation at the site of injection, though there is some burning at first, which disappears in a few minutes, and is replaced by a marked area of anæsthesia. The drug is more soluble when prepared with benzoate of soda. A solution for hypodermatic use may be made of theine and sodium benzoate āā ʒj, sodium chloride gr. 8, distilled water ʒi; ♏6 contain gr. 0.5 of theine. Theine tablets for hypodermatic use are also made.

Theine is solely a pain reliever, but in cases of obstinate and protracted pain it must be aided by other drugs that improve the nutrition of the affected nerve, or that may remove the persisting diathesis. As regards the difference between theine and morphine, Dr. Mays sums it up as follows: When it is necessary to narcotize the centres innervation in order to relieve a given pain, then morphine is indicated; but when it is not necessary to do this, theine will accomplish the work safer, better, and more promptly than morphine. On general principles it may be said that morphine gives the best results in acute pain, while theine is most beneficial in chronic affections of the sensory nerves.

DISTILLERY-FED CATTLE IN CHICAGO.

For the second or third time the Mayor of Chicago now says that slop-feeding in Chicago must be discontinued, and he will have all the cattle sheds removed from the city limits. This decision is based upon the report recently made by an expert who was detailed to ascertain the amount and cause of pollution in the Chicago River. Strange to say, the head of the city government would not allow a reporter to see the expert's report. To use his chaste and elegant diction, "It's too tough to be printed. It is much worse than was expected." The *Tribune* suggests that the real reason for withholding the report is that it would furnish evidence for Peoria and other towns below Chicago on the Illinois River to use in the threatened suit against Chicago for not taking proper care of its sewage.

This distillery feeding of cattle, which has been carried on for a long time in direct violation of the law, has been connived at, and in fact allowed, because it is said: "It isn't profitable to our distilleries unless they can feed cattle." "The distilleries will have to make some arrangement to feed their slop or lose their profit. The result of the enforcing of the order will be to make them move their entire plants to some other point." Then so much the better for Chicago and the worse for the other point. If the Chicago brewers and distillers cannot make a handsome profit on the adulterated abomination they are selling to the public at an enormous advance on the cost of making, by all means let them move to some other point—or go into some honest business.

EDITORIAL NOTES.

DR. EMIL BESSELS, the well-known physician, naturalist, and arctic explorer, died of heart failure at Charfreitag, Stuttgardt, on March 30, aged 40 years. Dr. Bessels was well-known in scientific circles in this country, having come to America in 1871 to undertake the scientific direction of the North Pole Expedition under Hall, on the *Polaris*. He wrote the "Physical Observations" of the narrative of the voyage of the *Polaris*. In 1876 he settled in Washington as Secretary of the Smithsonian Institution, until his house was burned, and he narrowly escaped with his life on Christmas Eve, 1885, when he returned to Europe and settled in Stuttgardt, where he remained until his death.

THE USE OF VESICANTS.—WYSS, of Geneva, has published a veritable diatribe, in *Der Forschritt*, against the use of vesicants, asserting that the use of them is a useless cruelty, and that he has never had any good effect from them in pneumonia, pleurisy, sciatica, and other affections; that they interfere with the patient's sleep, act disagreeably on the urinary organs, and cause obstinate eruptions, and that they increase the fever, and may affect the general condition of the patient unfavorably. That vesicants are abused in many cases there can be but little doubt, and there is scarcely less doubt that rubefacients or at most "flying blisters" would be of more service in many cases in which vesication is used. In so far as Wyss' experience with blisters in pneumonia are concerned, it is important to know in what stage of pneumonia they were used, since it is admitted that they are harmful in the inflammatory stage.

BICHLORIDE OF MERCURY IN TYPHOID FEVER.—GLASER, of Hamburg, gives the results of the use of bichloride of mercury solution, 1:4000 or 5000, in typhoid fever. The interest that attaches to his experiments is in the attempt to determine whether it is possible to kill the bacilli of typhoid fever—or cure the disease by antiseptics and germicides—without killing the patient. Glaser used the solution in 23 cases, and his mortality, 21 per cent., is sufficient to make anyone at least extremely cautious in using it in the future; and as there does not seem to have been any positive gain from its use there seems to be no reason for repeating the experiments. Certainly, his cases showed none of the improvement seen in the treatment by calomel, so much used by some distinguished German clinicians.

DR. MIDDLETON has, as was to be expected, been acquitted of the murder of a gypsy guide, who attempted to take his life in the cathedral of Cordova, Spain. It may be remembered that when at the top of the cathedral tower the man seized Dr. Middleton from behind, after having his stick wrested from him, the doctor drew a revolver he fortunately had with him, the first shot entered the gypsy's mouth, the second pierced his heart. The shots were fired at the assailant over the doctor's shoulder.

THE "WIENER KLINISCHE WOCHENSCHRIFT," the first number of which appeared on April 5, is to be published under the editorship of Dr. G. Riehl. It is more pleasing to the eye than most Continental journals.

A FACULTY OF MEDICINE FOR MARSEILLES.—There is a scheme on foot for elevating the present school of medicine of Marseilles to the rank of a Faculty, and adding to the school a chair of Bacteriology.

SOCIETY PROCEEDINGS.

MEDICAL SOCIETY OF THE STATE OF CALIFORNIA.

Eighteenth Annual Meeting, held in San Francisco, April 18, 19 and 20, 1888.

[*Report furnished by the Sacramento Medical Times.*]

First Day—Wednesday, April 18.

Morning Session.

The Eighteenth Annual Meeting was held at B'nai B'rith Hall. The Society being called to order by The President, R. H. Plummer, M.D., of San Francisco.

C. G. Kenyon, of San Francisco, on behalf of the resident members, extended a hearty address of welcome to the visitors from abroad. He alluded to the material advances which had been made in the State during the past year. He directed attention to the exhibition in connection with the meeting and dwelt upon the importance of the new feature.

The President, R. H. Plummer, of San Francisco, then delivered the Annual Address. The following subjects were recommended for the consideration of the Society: In accordance with a bill introduced at the instigation of the State Board of Heath at the last session of the Legislature, he advised that no body should be interred without a permit from a board of health, health officer or justice of the peace, upon a certificate from a legally qualified physician, the coroner, or, in default of this, the written statement of two reputable citizens. The permit or certificate to be duly recorded. In this connection he alluded to the necessity of the formation of local boards of health in the smaller towns and pointed out that no further legislation was needed as the supervisors have been armed with the necessary authority. The necessity for the establishment of a quarantine station at the Port of San Francisco was urged and the existing deficiencies pointed out, together with the present status of the measure now before Congress appropriating the necessary funds for this purpose. The importance of a State law compelling the vaccination of all children before entering the public schools was urged. At present several cities have ordinances providing for compulsory vaccination within their limits, but are constantly exposed to infection from abroad. A general enactment would make this protective measure universal. Regarding the existing law providing for the recording of births, marriages and deaths, which has frequently been mentioned as inoperative and impossible to enforce, he directed attention to sections 3075 and 3077 of the Political Code and sections 377 and 378 of the Penal Code, where adequate penalties were provided. The present condition of the Constitution and By-Laws of the Society was mentioned, and the advisability of appointing a committee to revise and codify the same was urged. The recent action of the Board of Examiners in raising the standard of qualification, and requiring a three years' graded course from every applicant for a license to practice in this State was mentioned and the suggestion made that the Society heartily endorse the same. The necessity for a good primary education was dwelt on, and mention made of provisions in the bill now before the Society in which this had been provided for. The following committee was appointed to report on the recommendations contained in the President's address: C. E. Blake, W. W. Kerr, S. O. L. Potter, H. S. Orme and J. H. Parkinson.

Afternoon Session.

The Secretary, Wm. M. Lawlor, read the

report of the board of examiners.

The number of meetings held during the year was 13; certificates granted, 265; duplicate certificates issued, 2; applications refused, 5. Amongst those receiving certificates were 37 graduates from California schools. The work of the Board was steadily increasing, the number of certificates issued being 59 in excess of the previous year.

Dr. A. L. Gihon, on behalf of the

rush monument committee,

made a statement of its object and purpose. He said: When we determined upon erecting this monument, it was resolved, as there were 90,000 physicians in the United States—there are now 100,000—to limit the subscriptions to one dollar, and we should at least get one-quarter of that number to subscribe. I am quite sure that out of the 100,000 physicians in the United States we will find a quarter, at least, who will give us a dollar, and that will build a handsome monument. A great many physicians wanted to give more, but we were satisfied that we would receive more funds than we needed.

Drs. Gihon, Tyrrell and W. P. Gibbons were appointed a committee to collect subscriptions from the Society.

The report of the *Committee on Mental Diseases and Medical Jurisprudence* was read by Dr. W. W. Macfarlane, of Agnew. The speaker alluded to the barbarous treatment to which the insane were formerly subjected. The insane in California were amply provided for. He believed that the feeble-minded and idiots should be treated in their own county hospitals, which would be more economical than sending them to the State asylums. More than 60 per cent. of patients in the asylums are of alien birth. There has been an average of 152 Chinamen, and a cost of $22,000 each year. California is the only State having no Sunday law. To this much of our insanity, which depends on drunkenness, is due. He alluded to the prevalence of fœticide, which he thought had much influence on mental diseases, in consequence of physical deterioration resulting from it. Mental and moral treatment had much to do with recovery. Here the number of inmates was so great that it was impossible to give them much attention. He deprecated the custom existing in this State, whereby the management of the asylums and the appointment of the officials was in the hands of boards of trustees, instead of being under the control of the superintendents.

DR. J. W. ROBERTSON, of Napa, in opening the discussion, said: The question, whether or not insanity is on the increase, had often been discussed. There was no doubt that the number of the insane had increased. When the insane asylums were first opened they were looked upon as jails. It was found that but little restraint need be employed. In the reception wards of the asylums were placed some of the most intelligent patients, who understood the rules of the institution and were quiet. Patients, on their way to the asylum, are frequently subjected to rough usage, and consequently arrive in an excited and exhausted condition, but on finding that they are surrounded by quiet and order they soon calm down. There was not a single straight jacket in Napa or a dozen patients under restraint. Chronic and acute cases should be kept apart. One violent patient would upset a whole ward. It was desirable that the insane shouid be sent to the asylums early, as under the influence of strict rule and hygienic measures they were invariably benefited. Theoretically there should be an asylum for every county. This, of course, was impracticable, but there ought to be an asylum for every congressional district. Regarding the question of increasing the number of physicians in the asylums—of the 1,400 cases in Napa, about 800 received very little medical treatment. In other States, where the staffs were numerous, the salaries were small. The best men were therefore not attainable, and there was no permanency. It reqired a year's training for a physician to be successful with the insane. He believed that the existing system was the best. The suggestion that there should be one law for the government of the State asylums was an excellent one. At Napa the Board had absolute control over the appointments and dismissals.

DR. W. H. MAYS, of Stockton, said that insanity was not more prevalent in this State than elsewhere. There were in Stockton 1,600 cases; in Napa 1,400. Estimating the population of the State at one million and a quarter, the rate would be one in four hundred —a very low percentage. In New York, the percentage was 1 in 352; Massachusetts, 1 in 362; Illinois, 1 in 345; Great Britain, 1 in 348. The profession should endeavor to remove the prevalent belief that this State had more than its share of insanity. In no State in the Union were the insane so closely sifted out. There seemed to be an intolerance of any form of mental disease, and all cases were promptly sent to the asylums. He believed that there was a crying need for more medical help. It was true that a large number of the inmates did not require medical treatment, but they required what was of more importance—care, employment, amusement and general surveillance. He was glad to learn that the asylum for the chronic insane would soon be opened.

DR. H. D. ROBERTSON, of Yreka, said that it frequently happened that patients were discharged before they were cured. He was glad to know that there would soon be more accomodations for the insane, and he hoped the physicians in charge of the asylums would then use a little more judgment and make an effort to hold these patients until they were cured.

DR. MAYS thought that if the speaker was present in the asylums for a few months he would modify his statement that the authorities were hasty in discharging patients. The question of discharging a patient really was, "Is he so insane that he needs to be retained there?" When patients recovered, to all intents and purposes, and when they became sane enough to be discharged there was no alternative other than to do so, even if they again became insane. Patients are said to have recovered from diseases, as pneumonia, but that did not guarantee that there should be no recurrence, and it was the same thing in mental diseases.

DR. GROVER, of Berkeley, said that the overcrowding of the asylums was partly due to the fact that what are called "insane criminals" are sent there. There should be a branch asylum attached to the State Prison at Folsom or San Quentin for such cases.

EVENING SESSION.

DR. W. E. TAYLOR, of San Francisco, read the report of the

COMMITTEE ON SURGERY.

He had selected the subject of *Operative Procedure in the Treatment of Internal Cancer*. He assumed the existence of the disease called cancer in its usual acceptance, and he confined himself solely to the carcinomata, and their treatment by cutting instruments. He questioned whether modern operative surgery had not passed the bounds of prudence. He did not think that an operation should be performed unless with some hope of cure. By this he implied a permanent recovery without further extension, and he did not accept the three-year limit or no recurrence within that period. He wished to sound a note of warning—that we should pause and well consider before performing operations of this class. He believed that operations for internal cancer would, in the future, be less frequently done than now. The difficulty of an early, and even a correct diagnosis of internal cancer was extreme. He cited Butlin in support of this position, that authority condemning too frequent interference. He characterized the results of some of these operations as ghastly—in one series, a total of 364 operations and 126 recoveries. The necessity of diagnosis was dwelt on and instances of "cancer" cured by appropriate treatment mentioned in this connection. The splendid results achieved in abdominal surgery encouraged these operations, but there was no comparison between operations for benign and malignant tumors. Complete removal in the one case was cure, in the other only a hope of ultimate recovery could be held out. In non-malignant disease, where life is threatened or great suffering is undergone, the surgeon is justified in operating. In malignant disease, it was unwise and unsurgical to use these facts as arguments in favor of operation. No matter what advances in operative *technique* had been made, the clinical fact remained that a cure was impossible until a specific remedy was found.

DR. T. W. HUNTINGTON, of Sacramento, in opening the discussion, said that he regretted that the

subject could not have been reviewed from a different standpoint from that adopted by the author. He was glad that a halt had been called to indiscriminate operations upon neoplasms, regardless of their end. It was true that some brilliant results had been obtained, and it had been claimed in consequence that the operations in all instances were justifiable. It had been said that the lawgivers of art were not always artists, and he was forced to admit that the lawgivers of surgery had not always proved to be surgeons. He believed that the ambitious operator, seeking the greatest good of the greatest number, had field enough and opportunity sufficient in which to achieve honor and the greatest amount of service to the human race. He wished to thank the author for the work he had done. He believed it would be of great service to the Society and to the profession.

Dr. E. B. Robertson, of Jackson, had operated in several cases of malignant disease. In each case the growth had been successfully removed, but after a variable period of time had returned. He therefore believed that where we are fortunate in one case and the patient recovers and continues to do well, that it is simply an error of diagnosis. We may put off the evil day, but there is no such thing as cure.

Dr. L. C. Lane, of San Francisco, disagreed with Professor Taylor in the view which he had taken of the incurability of cancer. He was entirely satisfied that cancer was curable, and he was satisfied that he had cured it a number of times by operation. Since November 1876, he had operated 88 times. A number of the cases had been kept under observation. Many of them had died, but he could safely calculate that one-fifth were living. The great trouble was that the cases were not seen sufficiently early. From observation and study he was convinced that in a very large number of cases the trouble is at first purely local, and therefore curable by removal. There was a great prejudice against operation from the dissemination of the notion that the knife will not cure the disease, and it frequently happens that cases are not seen until too late. It was easy to talk and to give one's personal experience. He would, however, select one case, to show there could be no doubt as to the nature of the disease. In what might be termed a "cancer family" —the father and mother died of cancer; they were not operated on—a daughter had an unmistakable cancer of the mammary gland. An operation was performed on her nine years ago. She is, and has remained well ever since. A granddaughter also had the disease. Her breast was removed five years ago. There has been no recurrence. In these cases the operation had been performed early. A patient, who had been operated on twenty-five years ago for mammary cancer, and in whom the other breast was subsequently removed, is still living. With these facts before him he was compelled to disagree with Dr. Taylor. Billroth states that he has cured one-third of his cases, and Germans are very careful indeed of their diagnoses. A microscopic examination is invariably made. Personally he had always followed this rule.

Dr. Huntington inquired if the speaker's experience warranted operations on deep structures, as in cancer of the uterus?

Dr. Lane: I believe I was the first to perform that operation in the United States. Nearly all the cases were seen too late. They had been cauterized and portions of the neck had been removed in every case except two. I believe the operation is justifiable if we could get the case in time, but I should carefully select my case and would be guided by previous experience.

Dr. W. F. McNutt, of San Francisco, said the statistics of removal of the uterus for malignant disease are much better in Europe than in this country. Martin has had marvellous results—his cures being about forty per cent. The secret of this is early diagnosis, for which the microscope is relied on. He did not think that an American surgeon could be found who would operate on this evidence alone. Enlargement, hæmorrhage, pain, and all the physical symptoms were deemed necessary. Then when an operation is performed the patient dies. The speaker had operated on a patient for cancer of the lip thirteen years ago, and he is now perfectly well. Four years ago he had removed a breast. The disease was well advanced. All the glands were removed. The patient is now perfectly well. He thought that more attention should be given to early diagnosis, and by that means we could expect to relieve more of our patients, and fully justify the operation.

Dr. J. D. Arnold, of San Francisco, said that where the individual experience of surgeons would put them either on the radical or conservative side of the question, he believed that the true pathology of the disease should be made the touch-stone for operation. If the surgeon believed the disease to be systemic, operation was only justifiable for the relief of pain and prolongation of life. If, however, he believed that cancer was a purely local disease, and could become systemic through actual extension, his decision would depend on whether or not he could completely remove the diseased structures.

Dr. Charlotte B. Brown, of San Francisco, thought that the refusal to operate often exercised a disastrous effect upon patients by confessing the hopelessness of these cases. She would operate even in the face of a large mortality, and she thought that other surgeons shared this feeling.

Dr. C. Cushing, of San Francisco, said that his personal experience was limited to malignant diseases affecting the uterus. He agreed with Dr. Arnold as to the main principle which should underlie operative procedure. In cancer of the uterus there were only two conditions which warranted active interference. One is that the disease shall be limited to the uterus not affecting the surrounding tissues. The other is where the disease has extended sufficiently to produce an amount of hæmorrhage and discharge, which seriously impairs the comfort and immediate health of the patient. Cases in which the surrounding tissues are involved, but without serious discharge, are not proper cases for operation. When the uterus was fixed it was unwarrantable to remove it. In the first place, it involved the danger of im-

mediate death. In the next, there was no such thing as a cure. The only possible justification for surgical interference is to gratify the woman in making her think that something is being done, and thus keeping her out of the hands of the quacks. He believed that these two propositions were sound. A portion of the growth should be subjected to microscopic examination. If this proved that it was cancerous, an operation was justified under the limitations that he had laid down. Outside of these, he believed that interference was not warranted.

DR. J. ROSENSTIRN, of San Francisco, believed that the position as to the advisability of removing internal cancer in strict opposition to the removal of external cancer was an erroneous one. Why should we believe that cancer of the uterus would be more liable to affect the organism than diseases of the mammary gland? The real secret of success was early operation, and we should endeavor, where we can make a positive diagnosis, to have our patients submit to operation. Extirpation of the larynx had been mentioned, and it was true that in the statistics quoted by Dr. Taylor there was an alarming mortality; but if we look to the statistics of one operator, Eugene Hahn, we find that he has only two deaths following fifteen operations. Of these, two are now well — one seven and the other three years after operation. Without advocating operation, he thought that we ought to endeavor to improve our methods. We could not cure cancer, but we were certainly able, in many instances, to relieve intolerable suffering, and to prolong life with freedom from pain for many months.

DR. TAYLOR, in replying, said that he did not wish to be regarded as considering these operations unjustifiable. His object had been to call attention to indiscriminate operations for internal cancer, simply because consent was given, and because the patient may survive the operation. Operations on properly selected cases were justifiable. Notwithstanding what had been said he felt that true cancer involving an internal organ, was not curable by operation. He did not consider that operations for external cancer were unjustifiable. They were justifiable in many cases, with a view to both physical and mental relief. He questioned whether a microscopical examination was always correct, and doubted the competency of many in the use of this instrument. Investigators often found what they expected to find. The object of his paper was to call attention to indiscriminate operations; to ask for a reconsideration of the subject and greater care in the selection of cases.

SECOND DAY—THURSDAY, APRIL 19.

MORNING SESSION.

DR. I. E. OATMAN, of Sacramento, read the report of the Committee on Diseases of Women. He wished to notice particularly the subject of

ECLAMPSIA.

While albuminuria invariably accompanied eclampsia, its etiology was uncertain. He believed that if pregnant women would place themselves under the care of a competent physician during gestation, eclampsia could in every case be averted. If convulsions appeared, they could be combated by narcotics; but these required to be continued in full doses to maintain the effect. In veratrum viride, in 10 ♏ doses, an efficient remedy existed. Early and rapid delivery, under an anæsthetic if necessary, was indicated. Treatment should be continued after delivery to maintain that degree of relaxation in which convulsions never occur. He included in his paper infantile convulsions during severe fever or from injury and gastric disturbance. In these cases treatment must be directed to the removal of the cause.

DR. WASHINGTON AYER, of San Francisco, in the report on Public Hygiene and State Medicine, directed the attention of the Society to the subject of

EXPERT TESTIMONY IN CASES WHERE MENTAL DISEASE IS ADVANCED AS A PLEA OF DEFENSE.

The course pursued by the courts, where such pleas as emotional insanity are advanced, is nothing but a hippodrome of justice, and by this means the testimony is made to appeal so much to the sympathy of the jury that the ends of justice are more frequently defeated than served by it. In addition to this, it is an inducement for depraved persons to commit crime in the hope that such a plea will be advanced. The expert, although treated with courtesy while on the stand, is hampered by hypothetical questions, to which he is only allowed to answer yes or no; thus the jury is completely puzzled, while at the same time the value of the testimony, as an aid to arrive at a just verdict, is greatly impaired. To avoid such manifest injustice the defendant, in cases where such a plea has been advanced, should be examined by an expert committee of three, appointed for this purpose by the Governor of the State, whose report should constitute the only expert testimony in the case. Dr. Ayer also urged the separation of insane criminals from other insane patients, either by providing a distinct asylum or by segregating them into different wards.

DR. W. P. GIBBONS, of Alameda, inquired the number of insane who had been sent to the asylums from the State prisons, and whether they were liberated at the discretion of the authorities at the asylums?

DR. GROVER, of Berkeley, said: When a criminal is deemed insane by the legally constituted commission connected with the State prisons, consisting of the warden, captain of the guard and a physician, they are sent to the asylum. When the authorities at the asylum deem them to be sufficiently sane, they return them to the prison to serve out their term. This subject has been frequently agitated, and has always been one of great importance. Criminal insane are sent to the State prisons for murder. I have several of them in my mind who were no more insane than any person in this room. During the time that I was at Folsom several were sent to Napa and Stockton. We had to send them, because we had no place to put them, unless they were kept in solitary confinement. The subject of expert testi-

mony is of the greatest importance. The medical witness was frequently not examimined or given an opportunity to explain. He was asked hypothetical questions, and required to answer yes or no. It could therefore be seen how valueless and misleading this class of evidence frequently was.

Dr. J. W. Robertson, of Napa, urged the importance of this question. The criminal insane received at Napa were not segregated, as the institution was overcrowded. There was no difficulty for a criminal to escape, if he had sense enough to do so. He deprecated the practice which existed of sending criminals to the asylums without the regular commitment, as they were thus in perfect ignorance of the cause of insanity or of its form.

Dr. Walter Lindley, of Los Angeles, moved the following resolution, which was adopted:

Resolved, That this Society especially endorses that portion of Dr. Ayer's paper referring to expert testimony, and that it be referred to the Committee on Medical Legislation, with a request that they take active steps to have it incorporated in the laws of the State.

Afternoon Session.

The Committee on Organization of County and District Societies reported that during the year two societies had been organized: the Sonoma County Medical Society, March 5, 1887, and the Napa County Medical Society, on December 5, 1887.

The effort to establish a quarantine station at San Francisco was unanimously endorsed, and the representatives of the State in Congress telegraphed to that effect.

The following were elected

Officers for the ensuing year.

President—James Simpson.
First Vice-President—Walter Lindley.
Second Vice-President—W. J. G. Dawson.
Third Vice-President—W. A. Briggs.
Fourth Vice-President—J. E. S. Baker.
Secretary—W. Watt Kerr.
First Assistant Secretary—L. M. F. Wanzer.
Second Assistant Secretary—H. M. Sherman.
Treasurer—G. C. Simmons.
Board of Censors—G. J. FitzGibbon, C. C Valle, S. F. Long, H. W. Dodge, E. W. King.
Board of Examiners—R. H. Plummer, C. H. Steele, C. E. Blake, C. E. Farnum, Jules Simon, W. S. Whitwell.

Evening Session.

The report of the Committee on Diseases of Children was read by Dr. H. M. Sherman, of San Francisco. He said that

Entero-colitis of children

became prevalent when the minimum daily temperature is above 60° F. Bacteria thrive in this condition, and produce various poisons—the ptomaines, of which tyrotoxicon has been chiefly studied. The propagation of these bacteria is hindered by the antiseptic properties of the gastric juice and bile, but if indigestion takes place, bacteria find a favorable culture medium, develop rapidly, and produce their specific effects. In accordance with these views, the modern treatment has been modified. Laxatives, followed by antiseptics, such as bismuth, salicylate, naphthaline, resorcin, nitrate of silver and bichloride of mercury, are the remedies most in favor.

Dr. Henry Gibbons, Jr., of San Francisco: Summer diarrhœa is a disease which is almost unknown in this city. We have diarrhœa, but nothing to compare with the summer diarrhœa of the East. He inquired if, in the treatment of these cases with naphthaline and sodium salicylate, no other treatment is used in connection therewith? Is it to be understood that no opium is used, but that the treatment is conducted solely with one or other of these drugs?

Dr. Sherman: In the case reported by Dr. Holt, no opium was used.

Dr. Gibbons: Without any knowledge of the probable bacterial origin of the disease, the older physicians were accustomed to use calomel. The initial treatment was, as has been mentioned in this paper, the exhibition of a dose of castor-oil, in order to remove the decomposing materials on which the disease depended. This is the treatment specially advised by West. In such cases. both calomel and hydrargyrum cum creta were also used extensively for a like purpose, not only for the initial purpose of removing the defective secretions, but for the purpose of a continued treatment. It seems, at the present day, that the older physicians had a little more practical knowledge of the value of some drugs than those of a later period supposed they had, for you will remember at one time calomel and similar preparations were almost tabooed. Now it is discovered that they are germicides, and probably accomplish a great deal of good on that account, if we believe in the efficacy of the bacteria in the production of summer diarrhœa. The older physicians were also accustomed to use creasote, which is of some value. It has been long my practice in the treatment of diseases of this character to commence with a dose of hydrargyrum cum creta, or calomel, often guarded, as the expression used to be used, with a certain amount of opium; and one dose will sometimes be sufficient to practically cure a severe attack of diarrhœa. I must confess that I have not arrived at a conclusion which would make me willing to discard opium in the treatment of these diseases. Long ago I learned the efficacy of bismuth and opium in the treatment of children and adults, and have found it an excellent combination.

Dr. J. A. Anderson, of San Francisco, would not attempt for a moment to criticise the paper that had been presented, were it not that it seemed to inculcate the idea of treating these diseases by the antiseptic method alone. That the diarrhœa is occasioned by bacteria all will admit, but there are cases when the ptomaines and bacteria in the system have brought about a train of symptoms which the mere administration of germicides will not remove. A child whose temperature has run up to 104° or 105° F. with cholera infantum may be filled up with germi-

cides, but unless you lower that temperature, your removing the germs will not relieve the child. Place the patient in a cold bath, and lower the temperature as the doctor suggests, and also give opium which decreases the secretions, and thus takes away the food of the bacilli, and you will have greatly aided your antiseptic treatment. The speaker said he practiced south of Market Street, and saw true cases of cholera infantum. He recommended the use of the cold water bath, and especially opium.

DR. GEO. CHISMORE, of San Francisco, did not see that the general practitioner had at present a sufficient justification for abandoning older methods, and basing his practice exclusively upon the theory of bacteriology. Until the battle between the micrococci and the ptomaines shall have been settled, until something more definite is ascertained, by which we can go to the bedside with more assurance and confidence, we will have to abide by the older methods. Another point which struck him as worthy of note was that the preceding dose of castor-oil is in many cases sufficient to cure a case of itself. There seemed to be a direct conflict in the practice followed. A dose was given to clear out the bacteria, and then a dose of opium to lock up the bowels, and retain them there. In his practice, in many cases, during the hot season and the fruit season, of children with a temperature of 103° to 105° F., the administration of 4 grains of calomel and a little sugar would often find the child on the next morning minus its temperature, plus an appetite, and virtually well.

DR. G. F. G. MORGAN, of San Francisco, said that if the diseases mentioned by Dr. Sherman were due to bacteria, we might hope to destroy their activity by the free use of alkalies. He had understood Dr. Rosenstirn, last evening, as stating that modern investigation had shown that bacteria did not thrive in alkaline media; if so, the employment of alkalies was logical.

DR. SHERMAN, in replying, said: Only those remedies which had been advised in the last year or so were considered in his report. The older methods were left untouched. West, in his administration of castor oil for the diarrhœa of children, gave it in connection with opium in very small doses, but frequently. Its effect never was to clean out the bowels. The speaker used it very often. It always soothed the intestines, and gradually checked the diarrhœa. Calomel is known to be a germicide. Bismuth is also acknowledged to be a germicide, and is used in surgery for wound dressing; the wounds being douched during the operation with water in which bismuth is suspended. Oxide of zinc is used in the summer diarrhœa of children, especially for its control over vomiting. It has also been used as a wound dressing. One class of remedies much used, are the astringents, gallic and tannic acid, tincture of catechu and tincture of kino. How they can be antiseptics is at first a little puzzling. But if we remember that they have the property of forming insoluble salts with some alkalies, it is quite possible that they may form such salts with the alkaloidal bodies, the ptomaines, and thus render them inert. In regard to whether the treatment should be limited solely to antiseptics, it was stated by Holt that these were the only remedies used. The true indications of the case should be met either by sedatives or stimulants. There is no doubt about the efficiency of a sedative dose of morphia, or a stimulative dose of alcohol, or digitalis, or nux vomica, but the main treatment was by antiseptics, and these others were subsidiary and auxiliary.

DR. GEO. C. PARDEE, of San Francisco, read the report of the *Committee on Ophthalmology, Otology, Laryngology and Rhinoscopy*, giving an extensive *résumé* of the recent progress in these branches. Among the subjects touched upon were the treatment of corneal ulcers by the galvano-caustic and by corrosive sublimate; conjunctival blenorrhœa and its prophylactic treatment; the occasions requiring erucleation of injured and blind eyes; the cure of chorea, epilepsy, and other nervous troubles by correction of errors of refraction and accommodation; the treatment of glaucoma without operation, by eserine and pilocarpine; the treatment of choroiditis pigmentosa by electricity. He mentioned the return to Daviel's operation; the irrigation of the anterior chamber and the use of antiseptics in cataract operations, and the abandonment of bandages and rest in bed after extraction.

DR. A. P. WHITTELL, of San Francisco, wished to direct special attention to one subject mentioned in the report—blennorrhœa at birth. It is something that must interest the profession in general, when we consider how much blindness is due to this one single cause. It is in the power of almost every one attending a woman in confinement to prevent this sad result. When it does supervene, by proper treatment total blindness will never occur, although the vision may be impaired. Vision with one eye is better than none at all. To run the risk of losing a good eye by temporizing with an eye which has been hopelessly injured, and already lost to sight, was, he thought, exceedingly bad practice.

DR. J. D. ARNOLD, of San Francisco, wished to draw attention to one or two little points in rhinology. Dr. Pardee adverted to the fact that a number of obscure reflex symptoms have been properly of late ascribed to some irritation in the nose, but he did not refer to the fact that a number of cases of asthma had been reported as thoroughly cured by cauterization of the hypertrophic tissues on the turbinated bones. Voltilini discovered that nasal polypus was frequently the direct cause of attacks of asthma, and merely by accident he found in his first case that by removing the polypi an end was put to the attacks of asthma. Since then it has been discovered that not only the removal of the polypi, but the destruction of all the hypertrophic tissues in the nose will produce the same result, and that it will, in a great majority of cases, effect a cure. He would have liked to have heard Dr. Pardee refer more fully to the beneficial effect, which the introduction of the use of the galvano-cautery has had in the treatment of catarrhal diseases, which drive so many patients into the hands of the charlatan, and which are in the majority of cases absolutely curable by this procedure, excepting, of course, cases of ozæna.

Dr. J. H. Stallard, of San Francisco, believed that when we consider the amount of blindness caused by the neglect of ophthalmia neonatorum, it would be judicious to issue simple instructions to nurses and those having charge of infants. In his experience, milder astringents than the nitrate of silver had been sufficient, and he thought that some simple remedy might safely be placed in the hands of the laity. The use of these remedies should be just as much a part of the first dressing as the bath or the clothing.

Dr. H. D. Robertson, of Yreka, said that in the country the general practitioner was sometimes compelled to operate upon the eye, when the occasion was urgent and the patient too poor to obtain the services of an oculist. He had recently met with a peculiar case. The patient was a Kanaka, with double cataract. He made the preliminary incision on the right eye, and gently grasped the iris, when, to his surprise, that structure came away in its entirety. When operating upon the left eye he was still more cautious, and grasped the iris with the greatest care, making no perceptible traction, but it also came away. He had watched the subsequent progress of the case, and with this exception it had been most satisfactory. On careful inquiry, he ascertained that there was no history of leprosy, but that the subject had had tertiary manifestations of syphilis.

Dr. Wm. Ellery Briggs, of Sacramento, had noticed the extremes to which some oculists have gone in doing away with bandages, and giving the patient liberty in moving about. In regard to enucleating eyes, having had sad experience in several cases. he now advised enucleation when the eye was totally blind, and where a foreign body was probably present. He recalled two patients who had lost their eyes, one of whom would not submit to enucleation, though advised to do so. The other, having gone into the country for two days when ordered to remain under observation, returned with sympathetic ophthalmia and after brief treatment went to other oculists, but is now an inmate of the asylum for the blind. He often enucleated eyes which appeared well, but he did not think that he had ever enucleated an eye which would be of any use as an organ of vision. When the physician is gone the surgeon is justified in removing the eye, if there is a possibility of sympathetic ophthalmia.

Dr. Pardee, in replying, said that he would certainly enucleate an eye when there was any danger of its affecting the other eye. He was also in favor of enucleating when vision had been lost.

(To be concluded.)

CHICAGO MEDICAL SOCIETY.

Stated Meeting, January 3, 1888.

The President, W. T. Belfield, M.D., in the Chair.

Dr. Henry Gradle read a paper on

MORBID NASAL IRRITABILITY.

Morbid nasal irritability, or irritable nose, is a condition of morbid sensibility of the nasal surfaces associated with hypertrophy of the submucous cavernous tissue. The condition has been inadequately described, and is confounded in textbooks mostly with chronic catarrh. The best account of it is in Mackenzie's article on neurosis of the nose, in the "Reference Handbook of Medical Sciences." Most writers who have described it in the periodical literature consider it principally in view of the distant reflexes to which it gives rise. The local reflexes form the basis of the present paper.

There is first, the vascular reflex. The vascular or cavernous tissue normally developed to a slight extent at the front and rear end of the inferior turbinated bone, is enlarged and augmented, and may appear also on the side of the septum, on the floor of the nose and on the front end of the middle turbinated bone. Through any irritation by dust or chilling of the surface this vascular plexus becomes engorged and if well developed in proportion to the size of the nasal cavity it obstructs the passage. It is the temporary or fleeting character of the obstruction which characterizes the irritable nose, not any permanent narrowing of the passage. Almost invariably engorgement occurs on one side at a time and then may jump over to the other.

Dependent upon this vascular dilatation is the second reflex, namely, sneezing. This may attain such a degree as to annoy the patient steadily. With the sneezing there occurs a third reflex, namely, copious secretion of clear mucous, indicating the absence of any inflammatory condition. This irritable nose may lead to reflexes in distant regions as to the eyes, ears, throat or nervous system at large. The irritable nose may be a symptom of some other nasal disease such as catarrh or the presence of polypi; it can also be caused by large irritated tonsils. But in many cases it exists by itself without any other primary disease to which it could be traced. It is very much influenced by the climate and patients can get relief by going to the mountains of the West or to the Pacific coast.

In the treatment any traceable causes such as tangible diseases of the tonsils should first be removed. Quinine relieves the attacks but probably does not cure them. No other drugs have seemed to the writer to be be of any service. Where the condition is not symptomatic of another disease of the nose the only cure is the destruction of the cavernous tissue by the galvano-cautery, or in milder cases, by chromic acid. The latter agent is not as reliable as the former. A cure is possible whenever the extent of hypertrophied cavernous tissue is circumscribed, while where it is very diffuse, relief, but not an absolute cure can be promised.

Dr. N. S. Davis, Jr., reported a case of

RUPTURE OF AN AORTIC VALVE.

From the appearance of the specimen I exhibit a diagnosis cannot be made with certainty, but from the history of the case, together with the appearance of the valves, it seems probable that sudden rupture in one of them has taken place.

The history is as follows: On the 17th of Novem-

ber the patient entered Mercy Hospital. He complained of illness for about four months; prior to that time he had been in good health. Some years ago his hearing began to fail and he lost his employment as switchman on a railroad on that account. After that he continued to work as a day laborer. Four months previous to entering the hospital he was carrying a heavy load of coal upstairs when suddenly he felt something give way in his left side; he experienced considerable dyspnœa at once, and symptoms of cardiac insufficiency date from that time. At first the dyspnœa was noticeable chiefly on walking or on making rapid movements, but it was sufficient to necessitate his giving up all work. The dyspnœa increased steadily and he became very markedly anæmic, and in addition exhibited signs of general œdema. At the time he entered the hospital there was evidently fluid in the abdominal cavity as well as extensive anasarca of the extremities. He was feeble and so short of breath that he was unable to lie with any degree of comfort, but had constantly to sit, and slept in this position. The pulse was exceedingly feeble, the heart movements very rapid.

My father saw the patient the day after he entered the hospital and examined him before the clinical class. At that time his condition was a follows: In addition to the dyspnœa, œdema and anæmia, a collection of fluid was found in one of the pleural cavities. The lungs were evidently œdematous. There was probably chronic venous congestion of their lower and posterior portion. The movement of the heart was considerably more rapid than normal, its action was feeble, the cardiac sounds were distant and it was suggested that probably there was some fluid in the pericardial sac. In addition there was present over both the mitral and aortic areas a regurgitant murmur. The area of cardiac dulness was greatly increased in all directions. It was supposed that the heart was greatly dilated and that regurgitation occurred in connection with a lesion of the valves. There was no prior history of rheumatic trouble in the case. It was noticed that the liver was considerably enlarged. A little later in the same day the house physician noticed that the patient was sleeping almost constantly, and that the heart's action was very much more feeble and that the respiratory motions were only eleven to the minute. On arousing the patient the respiratory movements improved somewhat. On the following morning the patient was more drowsy, stupid and sleepy. In the afternoon of that day he exclaimed suddenly that he felt faint, and with a gasp or two was dead.

The post-mortem was made by Dr. Frank Andrews. He found a small amount of liquid in one pleural cavity. The lungs were œdematous and quite firm in the lower and posterior parts from chronic venous hyperæmia. The liver was enlarged, unusually hard and full of blood; the spleen normal; the left kidney normal; the right kidney had a slightly adherent capsule. The heart was greatly enlarged. In the pericardial sac there was an ounce and a half of fluid. The heart on section was found to be very much dilated—both the left and right ventricles were dilated. The walls, as you see, are not thickened. On the right side the valves appear normal; on the left side the mitral valves are normal but the aortic valves are seen to be thickened, especially one of them, whose edge is considerably thickened and somewhat rounded. Nowhere is ulceration or destruction of tissue from that cause to be seen. The valves are not roughened by verrucosities or otherwise. The part of the valve where there is loss of continuity is also slightly thickened. The break in continuity, here seen, occurs in the edge of the valve just where it should be attached to the aorta. If rupture took place necessarily it took place four months before the death of the patient, and naturally thickening of the torn edges might occur. There is also present in the aorta above the valves small areas of thickening and hardening, evidence of long prior inflammation of its lining. Taking into consideration both the morbid appearances and the history of the case, it is most probable that four months before death, at the time from which the patient uniformly dated his trouble, a rupture of the aortic valve occurred. The valve had prior to this been enfeebled by the changes that had occurred in it incident to an extension to the valves of older endarteritis.

DR. NORVAL PIERCE reported a case of

OPERATION FOR HÆMOTHORAX.

(See page 582.)

DR. A. E. HOADLEY: There are some points about the case of hæmothorax that occurred to me while the history was being read, that I should like to refer to. I should conclude from the history, that some large vessel was wounded—that would be the inference as the exsanguination of the patient was rapid and extreme, and I should also conclude that if that vessel was in the lung that there must have been expectoration of blood. I do not see how it could have been avoided if the blade of the knife penetrated the lung sufficiently to wound a large vessel—therefore I exclude wounding of the lung. In the situation of that wound, immediately beneath the chest-wall, is the internal mammary artery, a good sized vessel. The intercostal was suggested, but these are given off from the internal mammary, and in that situation are small, and could not exsanguinate a patient so rapidly and so completely as this patient was in so short a time, so I conclude that the internal mammary artery was the one divided. Then again, it seems to me, that it would have been good practice to have endeavored to secure that vessel; there was a straight cut through the intercostal muscles, and I think some kind of forceps could have been introduced with a view of compressing the divided ends of the internal mammary artery. After the thoracic cavity was full of blood no harm could have come from the introduction of the instrument designed to compress the divided ends of the artery by the admission of air; provided it had been done antiseptically. I think the hæmorrhage could have been controlled by introducing a button into the wound, such a one as would go through the wound with a string attached to it, pushing it into the thoracic cavity, and then by making traction on the string outside, it would have

closed the bleeding vessels. This accomplished the subsequent treatment would have been more satisfactory. As far as the tolerance of the pleural cavity of blood is concerned, there is no difference between the two cavities, abdominal and thoracic. The one can tolerate the presence of blood as well as the other; the one can absorb as large a quantity of blood as the other; they are both serous membranes, identical in character and powers of absorption.

The case given is very interesting and certainly very remarkable. I was very much interested in the history. The patient evidently has good vitality to stand such a strain.

DR. PIERCE: I have nothing special to say in closing the discussion. Of course I might now do a great many things that I did not do at that time. But the man was in such an extremely low condition that anything more would have been out of place. Dr. Fenger was not sure that it was the internal mammary artery. The wound was a slight distance out of its course, about half an inch. Indeed, the character of the hæmorrhage, at least after the first week, is against this as the source. The position of the scar has changed with the sinking in of the chest.

As regards the clot being removed, blood does not necessarily clot in the pleural cavity at all, but may remain fluid indefinitely.

DR. W. T. BELFIELD exhibited a specimen of

MUSCLE INFILTRATED WITH TRICHINÆ.

It was a piece of gastrocnemius muscle from the amputated leg of a man now in the Cook County Hospital. Some eighteen years ago this man, then a resident of New York, in company with a number of other individuals ate of some poorly cooked ham and sausage; nearly all of those who partook of this article of diet became very ill within a week, and a large percentage died. This man was very ill for two months, and did not entirely recover his health for some four months. In consequence of the circumstances surrounding the case the difficulty was recognized as trichiniasis, and an examination of the muscles of those who died confirmed the diagnosis. This man recovered, and during the succeeding 18 years has enjoyed good health, except that he has at various times, and more particularly during the last six or eight years, suffered from rheumatism in different parts of the body.

This muscle, like all the other muscles of the amputated leg, is thickly studded with trichinæ. By taking a fresh cut surface near the light you can see the little white specks very closely set. These are shown in the microscope to be trichinæ. Pieces of muscle taken from all parts of the amputated leg are found as thickly set with the parasites as is this piece, and inasmuch as these parasites are more numerous in the trunk than in the limbs, we may infer that the number of trichinæ this man contains in his body runs up into the millions. Of course it is not unusual to find muscles studded with trichinæ in individuals who have been in the habit of partaking of raw sausage or half cooked pork; but it is rare to find them so thickly placed where the history makes it certain they were taken at one time. Very few individuals recover who swallow so many at one time as to produce so numerous a progeny. Those who are in the habit of taking uncooked pork can at different times take a few trichinæ without at any one time suffering from the invasion of so large a number as to produce the acute symptoms of trichiniasis.

The amputation was for disease in the knee-joint, and had nothing to do with the condition of the muscles.

CHICAGO MEDICO-LEGAL SOCIETY.

Meeting of March 3, 1888.

E. J. DOERING, M.D., PRESIDENT.

(*Concluded from page 571.*)

Conclusion of the discussion on DR. ETHERIDGE'S paper on.

THE MEDICO-LEGAL ASPECT OF UTTERANCES MADE IN MEDICAL SOCIETIES.

DR CLARK GAPIN: I must say I am pleased to hear this subject presented so ably on both sides. I think if the utterances on one side could be taken to the courts, the utterances on the other would certainly very neatly and effectually neutralize them; so I think, as far as this society is concerned, it has acquitted itself well in that respect. The subject is certainly an important one. Only a short time since I was consulted and retained to defend a case of malpractice in which this was the charge. I do not know that any case has been actually tried, but in this case the charge was made, the suit brought, and physicians assured the gentleman that he had a good case, that the literature of the subject, and the profession were with him. The case went so far as to be brought up in the courts, but was abandoned, the medical gentlemen who proposed to support him having failed to make their appearance and sustain him during the trial. That case impressed me with the fact that if we are not immediately upon this subject, in the law, we are very close to it. I had occasion to go over the subject preparatory to that trial, and I have made up my mind to this, that the great discovery of antisepsis, or what we might call therapeutic cleanliness, has come and has come to stay. I do not imagine, however, that it will remain in any very violent form; I think it will finally settle down to about what has taken place in other departments of the law; that what will be required of the practitioner in this respect will be the same that is required of him in surgery or the administration of medicines, ordinary care and diligence, and ordinary skill in view of the knowledge of the profession at or within a reasonable time of the date of the occurrence of the supposed injury.

Dr. Etheridge, it seems to me, somewhat overrates the importance of these utterances in societies. No court in which I have practiced will admit, as evidence, the transactions of a society, or surgical or medical books. I know there are some courts in which it is done, I think the courts of Iowa have admitted medical or surgical treatises, as evidence, but I think it is not done in the courts of the State of

Illinois, and I know the same is true of the courts of Wisconsin. For that reason I think it is doubtful if any of these utterances will find their way into the courts, but I think there are members of the profession who are so positive in their belief of the necessity of this antisepsis, or therapeutic cleanliness, you may call it what you will, that if brought to the witness stand they will express their convictions in such a way as to convince a jury that somebody has not exercised ordinary care and diligence. In medicine and surgery there is no ideal perfection and little that is absolutely sure, but I will say that my own experience as a physician has been very favorable to antiseptic treatment of the puerperal state, and if called upon the witness stand I should be compelled to say that one who had been careless with regard to the cleanliness of the patient had not done his whole duty by his patient. I think that what we should begin to do at once is to impress upon the profession at large—especially upon the careless members of the profession, that sooner or later they will have devolve upon them this responsibility, and that it may assume a financial aspect. I think that while Dr. Etheridge's view is quite correct there is a word beyond, and although the profession possibly is not to-day in a position to condem a man for want of this care, it is coming to that. We may pass antisepsis by as one of those fitful fevers of discovery which we have passed through before, but I take it that the antiseptic theory is one of the greatest discoveries of all ages, and that it will take its place beside those great discoveries which have come and remained. The danger in the particular respect under discussion is not so much from the literature on the subject as from the belief of the profession that the man who neglects this therapeutic cleanliness does not do his whole duty by his patient.

DR. L. L. MCARTHUR: Although one of the younger men, I have the temerity to rise to this question; and trust that it will not be imputed to simply the enthusiasm of youth leading me to jump at the new, and abandon the old, that I accept what to my mind appears definitely proven. Dr. Etheridge in referring to old theories that have been abandoned, and new ones which have taken their place, spoke in rather a scoffing way; in the way of decrying them; that any progress which we seem to have made is not progress, but only the adoption of the new for the old! He makes reference to the fact that fermentations were formerly supposed to be due to oxygen, then the last theory that the yeast plant was the cause of that fermentation. He cannot but admit that alcohol is the result of the life history of the yeast plant; that whenever the yeast plant is placed in dilute sugary solution, we always get alcohol; it is a positive demonstration not theory. From the yeast plant we get alcohol; we no not expect to get "scarlet fever!" If the vinegar plant is put into sugary solutions we do not expect to get alcohol.

The microörganism of puerperal fever may not have been discovered, but that some microörganism is present, even Dr. Parkes admitted, in saying that the case had died from some decomposition of the clots in the womb of the case in question; although all infectious material had been kept from without! He practically admits this decomposition was from the influence of microörganisms, and that without them we can have no decomposition. This has been demonstrated hundreds and thousands of times through the influence of the cotton plug in the gelatin culture tube. If we seal up tin cans with fruit in them so that the microörganisms are killed, the fruit remains without decomposition. And so with the microorganisms which may be in the vagina; and we all admit that there are plenty of them there, they may induce suppuration, and it is probable that suppuration goes on after every labor, as these white milky discharges contain microörganisms. If we admit a specific action for the larger microörganisms it is reasonable to admit the same for the smaller ones. To prove these points and advance science the proper way is not by deriding them, but to take up the subject oneself and work at it. All the advance that has been made in the whole theory of bacteriology has been made by the German, French and English Nations, Bastian and Pasteur making their advances in fighting each others theories. Having theories to begin with they endeavored to demonstrate them, and finally came around to fall into the same line, as the result of their *practical* experiments. Without a sound foundation medically we can obtain none legally. And that is the way advance can be made in medicine, by investigating the theories advanced, and proving them false rather than to cry them down, saying let us not be in too great a hurry. Certainly conservatism is valuable, and the conservatism which Dr. Etheridge advocates is of the character of the governor to a steam engine, it regulates and steadies it, but does not stop its progress.

DR. ETHERIDGE, in closing the discussion, said: I have but little to say in conclusion, and that is this: that puerperal fever is more discussed to-night than anything else. That was not the topic. I have nothing to say about puerperal fever, only incidentally as an illustration, and when the discussion brings out the remark that the conservatism of my paper is too conservative, I simply wish to say that everything of that kind is used as illustration.

Dr. Gapin came to the point when he gave an illustration of how this thing is working in the public mind. The Semmelweiss theory is good as far as it goes, but if we are to make a man's case in court stand or fall on the Semmelweiss theory it seems to me that we should be more accurate in our utterances. If that theory is without an attackable side then the logical conclusions therefrom would be all right. I am glad the subject has brought out some discussion, and I hope it may have its results in its bearing in the future upon the expressions made in these medical societies, where too much is uttered, perhaps, in the hastiness and ill consideration of youth, which would not be uttered after ten or fifteen years of practice.

PROFESSOR W. LEUBE has been appointed to the Chair of Clinical Medicine in Leipzig.

DOMESTIC CORRESPONDENCE

LETTER FROM NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

Treatment of Tubal Pregnancy.

At the April meeting of the New York County Medical Association Dr. Joseph E. Janvrin, for many years the associate of the late Dr. Edmund R. Peaslee, read a paper on the *Treatment of Tubal Pregnancy*, in which he advocated the primary removal by abdominal section of the tube and its contained fœtus before rupture of any portion of the tube has occurred. This procedure, he explained, was to be undertaken with the expectation of delivering the tube and its contained fœtus intact, and resorted to before the end of the fourth month of gestation. In a paper read by him before the American Gynæcological Society in 1886 he said he had recommended early laparotomy, as a rule, in cases of tubal pregnancy in which hæmorrhage had occurred (instead of employing electricity, as was now commonly done), for the purpose of removing all possible danger of further hæmorrhage. In December of that year he reported, at a meeting of the New York Obstetrical Society, a case in which he had diagnosed tubal pregnancy at the fifth week, and in which death had occurred at the end of the seventh week, from a second hæmorrhage resulting from a ruptured artery on the peritoneal surface of the sac; the first hæmorrhage, which was extremely small, having taken place from the same artery nine days previously, and galvanism having in the meantime been employed for the purpose of destroying the fœtus.

At that time he had become convinced, from this case and from three other similar cases, that the time to operate was when preliminary or partial rupture occurred, as evidenced by the first hæmorrhage; the primary collapse symptoms constituting an almost certain indication both of the pathological condition and of the need of immediate interference. In speaking of the symptoms of tubal pregnancy he had stated that he believed that it was easier to recognize this condition than hydrosalpinx, and that the presence of an irregular decidual discharge in a woman who had missed a period, associated with the normal signs of pregnancy and an enlarging, fluctuating, and exquisitely sensitive mass on one side of the uterus, and followed subsequently by symptoms of shock, could hardly be referred to any other condition, even as early as the fifth week. In a case of this kind he had also said that he would certainly perform laparotomy whenever the first symptoms of internal hæmorrhage occurred. Again, in a discussion at the January meeting of the Obstetrical Section of the New York Academy of Medicine in 1887, he had stated that in any case in which, from the rational and physical signs, he had become convinced that tubal pregnancy was present, even before symptoms of a rupture of the peritoneal covering of the tube presented themselves, he would most earnestly urge laparotomy, and perform it if he could obtain the consent of the patient. Up to the present time he had been able to find but one case on record in which the operation was performed prior to a laceration, or partial laceration, of the tube, and before the fourth month of gestation. This was one by Dr. Joseph Price, of Philadelphia, in September, 1887, reported in the *Annals of Gynecology* (Boston) for March, 1888; and in a recent letter to Dr. Janvrin concerning the case Dr. Price had said: "The history was simply that of delayed bleeding two weeks and constant pain and nausea. I operate for extra-uterine pregnancy or pus tube."

Having referred to the cases of laparotomy in tubal pregnancy, after one or more decided hæmorrhages, performed by various operators in this country and in Europe, he observed that all such operations, resorted to after there had been a rupture of some part of the tube, should be classed as *secondary operations*. The advisability of enlarging this field, by removing the tube with its contained fœtus before any rupture has occurred, and during the early weeks of gestation, Dr. Janvrin said he had advocated on every possible occasion during the past year and a half. Until very recently he believed that he stood almost, if not quite, alone as regards this point; but during the last few weeks he had found that other gynecologists also had come to the same conclusion. Thus, in the *American Journal of Obstetrics* for April, 1888, Mr. Lawson Tait said that, although he had never as yet been called upon to operate until after the sac had ruptured, if in any case met with by him there was a reasonable supposition of the existence of a tubal pregnancy which had not yet ruptured, he should recommend immediate laparotomy. Drs. Joseph Price and Howard A. Kelly, of Philadelphia, he believed were also in accord with this proposition. In a recent letter to Dr. Janvrin, Dr. Kelly had said: "The history of fœtuses which have been destroyed by faradization has frequently been associated with protracted suffering to the mother, and with conditions of chronic invalidism."

In speaking further of the bad effects sometimes resulting from the use of electricity he quoted Dr. Robert P. Harris, of Philadelphia, who, in the *American Journal of Obstetrics* for August, 1886, had referred to several cases in which attacks of peritonitis had occurred several years subsequent to the death of the fœtus, and due to its presence in the abdominal cavity. Mr. Tait had also very recently (*Amer. Jour. of Obstetrics* for April, 1888) pointed out the danger of the placenta going on to develop enormously after the death of the fœtus. Up to the present time, however, the weight of opinion among American gynecologists was decidedly in favor of destroying the fœtus by electricity in some form in cases in which the diagnosis has been made prior to the fifth month and in which there has been no decided hæmorrhage from the sac wall. Among the advocates of this measure stood Thomas, Lusk, Garrigues, Mundé and others, of New York, and M. D. Mann, of Buffalo; and each of these, as well as other operators throughout the country, had had excellent results with it. In the *Annals of Gynecology* for February, 1888, Dr. Mann had stated that Dr. Janvrin was able to find only three cases in literature,

including his own, where rupture of a vessel caused death without rupture of the sac. Since the publication of his paper before the American Gynecological Society, however, he had seen one other case in which this condition was fully demonstrated at the autopsy. Two other important specimens he had recently seen in cases in which abdominal section was performed. In one of these the fœtus had died from pressure of blood clots at about the end of the third month, and several other attacks of hæmorrhage had occurred between this date and the seventh month, when the tube, fœtus, clots, etc., were removed. In the second case, where laparotomy was performed at the seventh or eighth week, there was a history of slight hæmorrhage from the sac wall and slight peritonitis for a week or ten days prior to its removal.

In the paper referred to Dr. Mann had expressed the opinion that if rupture has not occurred, electricity should take precedence of laparotomy. To this proposition Dr. Janvrin said that he would assent, provided no experienced laparotomist could be found to operate; but not otherwise. With a capable operator at command he would urge abdominal section just as soon as the diagnosis had been made, and before any hæmorrhage from the sac, with its subsequent attacks of peritonitis, could take place. These frequently recurring attacks of slight hæmorrhage were exceedingly dangerous to the life of the mother, and when they had occurred, and the time came when laparotomy *must* be performed, the patient was in bad condition for the operation; while the procedure itself was much more complicated than at an earlier period. The same thing could be said in reference to waiting to perform laparotomy until serious symptoms had supervened, after the fœtus had been killed by electricity. Here, too, there would be more or less adhesions to deal with, and the work to be done would be much more difficult than the removal of a simply enlarged and still unruptured tube containg the fœtus, with no products of inflammatory processes to interfere with its ready extraction.

In the discussion on the paper the principal advocate of electricity, in preference to the radical operation advised by Dr. Janvrin, was Dr. Wm. T. Lusk, who said in opening that he wished he could be convinced by the arguments advanced that the time had come for the doing away with galvanism in the treatment of tubal pregnancy. It would certainly be very gratifying, he went on to say, if one could always perform laparotomy as this condition was diagnosed, as the operator would thus secure an amount of *éclat* which was not possible when electrity was employed. Destruction of the fœtus by the latter was a far less brilliant method of procedure, and when it was attended with successful results the operator was not infrequently subjected to insinuations that extra-uterine pregnancy had never existed at all. At the same time, he was so thoroughly convinced that these cases could be efficiently and safely treated by galvanism after the appearance of the characteristic colicky pains, that he did not as yet feel justified in abandoning so satisfactory a method. The operation was a very simple one, requiring no special skill; so that it could be practiced by any one; and, as a rule, the results were all that could be desired. He then mentioned that he had had under observation two of his cases, occurring in private practice, for a long period of time; one of them for six years, and the other for four years. At the time the first of these patients was operated on she was believed to be in a dying condition, but, after consultation with Dr. Thomas, it was decided to employ electricity, and the result was entirely satisfactory. There had never been the slightest bad effect, and at the present time the mass remaining was about the size of a pigeon's egg. In the second case the tumor was now about the size of an English walnut. Since the operation the patient had given birth to a living child, and there had been no trouble whatever at the time of parturition.

Now, if we had such an efficient method, which was perfectly safe in the great majority of instances, there did not seem to him to be sufficient reason for giving it up. Even if inflammation, suppuration or ulceration should ensue, we could under such circumstances usually perform laparotomy with satisfactory results. He was, therefore, convinced that, in the present state of our knowledge, treatment by electricity was the best mode of proceeding. As to performing laparotomy before rupture of any portion of the tube had occurred, the difficulty of diagnosis constituted a serious objection, and even Mr. Tait had expressed to him his inability to make a diagnosis at this time. In regard to the other five cases which he had treated with electricity Dr. Lusk said that he could not speak with the same confidence as the two just mentioned. The results were entirely satisfactory at the time but, as the women were hospital patients, he had not been able to follow up their subsequent history. If he could feel sure that laparotomy was just as safe as electricity he should certainly be willing to join the ranks of those who advocated this procedure; but up to the present, as he had stated, he had not yet become convinced of this fact. As to the danger of the growth of the placenta after the death of the fœtus, this seemed to him to be very slight; and, indeed, he questioned very much whether such a danger really existed at all.

Dr. Andrew F. Currier having stated that it seemed to him one of the inconsistencies of modern gynecology that operators should so frequently perform laparotomy for the relief of such conditions as hydro- and pyosalpinx, and yet hesitate to do so in the graver one of tubal pregnancy, Dr. Lusk replied that, in considering this matter, it was important to remember that while such conditions as hydro- and pyosalpinx could not be removed by electricity, this was entirely possible in tubal pregnancy. If, however, treatment by electricity were practicable in hydro- and pyosalpinx, gynecologists would hardly be likely to resort to laparotomy until electricity had first been given a fair trial. He then spoke of the importance, in arriving at a correct diagnosis in many cases, of first making a thorough examination of the patient, and referred to two cases in his own experience illustrating this point.

Dr. George T. Harrison said that his experience

with galvanism had been very favorable. In at least three cases he had certainly destroyed the life of the fœtus by means of this agency; and on examining one of these patients two years after the operation, he had found the sack much sunken. Since then the woman had also given birth to a child in a normal manner. Still, it was undoubtedly true that the tendency of modern gynecology was to advance in the line indicated by Dr. Janvrin, and, while he was not as yet quite willing to declare himself in favor of the general adoption of laparotomy in the class of cases referred to, he was free to confess that the results already obtained from this procedure, especially by some of the German operators, had had considerable weight in influencing him in its favor. At the present time, however, it seemed to him that the experience of the profession was as yet too limited to enable us to arrive at any positive conclusions on the subject. There was one point in regard to the diagnosis of tubal pregnancy as given by Dr. Janvrin which he thought should perhaps be somewhat modified, and that was in regard to the extreme sensitiveness of the tumor, since he had himself observed instances in which this great tenderness did not exist.

Dr. A. Palmer Dudley said that the all-important matter in connection with this whole subject seemed to him to be the question of diagnosis, and that he should very much like to know how to make the diagnosis. If this was ever established, the treatment was sufficiently easy, whether electricity or laparotomy was resorted to. Under the circumstances referred to by Dr. Janvrin laparotomy was a comparatively simple operation, and no more dangerous than when it was done for hydro- or pyosalpinx. He then related a case of his own in which he had supposed tubal pregnancy to exist, but on opening the abdominal cavity he had found a parovarian cyst with displacement of the ovaries and pyosalpinx, while the fimbriated extremities of the tubes were attached in one case to the bladder, and in the other to the rectum. He said that he would not hesitate to resort to laparotomy early in any instance where he was able to make out the diagnosis of tubal pregnancy; but in the case in question there was a condition other than tubal pregnancy giving rise to the simptoms described by Dr. Janvrin as characteristic of the latter.

Dr. Dudley having stated, in reply to a question of Dr. Janvrin, that he had not observed in this case an irregular decidual discharge, Dr. Janvrin said that he regarded this as the most important point in the diagnosis of tubal pregnancy. If the symptoms which he had mentioned, with the exception of those of shock (which were due to rupture), were noted in any case, he thought there would be no difficulty in making out the diagnosis before rupture of any portion of the tube had occurred. As to Mr. Tait's views on the diagnosis of tubal pregnancy before rupture, in the very last number of the *American Journal of Obstetrics* (April, 1888), he stated that he had never been able to make out the diagnosis at this time because he had never been consulted in any case until after rupture had taken place. While it was true that electricity was not, as a rule, followed by bad effects, certain cases had been reported in which there were evil results, and two such instances were referred to by Dr. Mann in the article in the *Annals of Gynecology* mentioned. The German cases spoken of by Dr. Harrison were all secondary operations, and, as far as he was aware, the only primary operation which had as yet been performed was that of Dr. Price, of Philadelphia, in September last. P. B. P.

BOOK REVIEWS.

A Guide to the Practical Examination of Urine. For the Use of Physicians and Students. By James Tyson, M.D., Professor of General Pathology and Morbid Anatomy in the University of Pennsylvania. Sixth Edition, revised and corrected. With a colored plate and wood engravings. 8vo, pp. viii–253. Philadelphia: P. Blakiston, Son & Co. 1888. Chicago: W. T. Keener.

It would be impossible to criticise this book adversely, and when a work of its kind has reached its sixth edition it is no longer in need of favorable comment. The most important additions to this edition are the phenyl-hydrazin hydrochlorate, alpha-naphthol, and thymol tests for sugar. A good deal has been added to the edition, while at the same time much has been omitted that was in the fifth, but only what is no longer required. Dr. Tyson is an acknowledged authority in urology, and his book is all that can be desired.

Theine in the Treatment of Neuralgia. Being a physiological contribution to the therapeutics of pain. By Thomas J. Mays, M.D., Professor of Diseases of the Chest in the Philadelphia Polyclinic, etc. Sm. 8vo, p. vii–84. Philadelphia: P. Blakiston, Son & Co. 1888. Chicago: W. T. Keener.

This little book, a reprint of a contribution to the *Polyclinic*, from September, 1887, to February, 1888, contains five chapters and an appendix, devoted to an introduction, the physiological action of theine, the special therapeutic indications for the use of theine, neuralgia, and, in the appendix, remarks made by Dr. Charles K. Mills on a paper read by Dr. Mays before the Philadelphia Neurological Society in December, 1887, on "Theine in Pain." As a contribution to the therapeutics of pain, from a reliable source, the little volume is well worth study.

MISCELLANEOUS.

Counterfeit Milk.—St. Louis *Republican*: A few days since a person representing himself to be the agent of an Iowa dairy farm called at the business office of R. Gortner & Co., ice-cream manufacturers, at No. 109 North Twelfth street, and desired to make a contract with Mr. Gortner to furnish him with the milk from which to make his ice cream. The price named was low, and from this and other indications Mr. Gortner became suspicious of the Iowa company's milk. He se-

sured a sample of the milk and took it to the St. Louis Dairy Company's laboratory to be analyzed by their chemist. The milk was carefully analyzed, and the dairy company's chemist saw at once that there was a dangerous and unusual counterfeit. It is a perfect imitation in every respect, and nothing but a chemical analysis would discover its true character. It is apparently rich and wholesome and pleasant to the taste. The amount and proportions of the solids that it contains are the standard test of the purity of milk. The following table give the component parts and the proportions in pure milk:

AVERAGE PURE MILK.

Water	86.23
Solids	13.77
Casein	3.23
Albumin	0.50
Butter	4.50
Milk sugar	4.93
Salts	0.6

The dairy company's chemist's analysis of the Iowa firm's milk gives the following result:

Water	81.3
Fat supposed to be cottonseed oil or some similar substance	2.6
Chemical substances corresponding to caseine and milk sugar, whose nature is not yet determined	15.0
Mineral salt, supposed to be nitre or some other similar substance	1.1
Total	100.0
Percentage of solids	18.7

The difference between the Iowa company's product, and pure milk will be readily perceived by reference to the tables above. The chemist who made the above analysis states that he has every reason to believe the substances that in the Iowa "milk" take the place of butter fat, caseine, milk sugar, and ash are all injurious. Exactly what these substances are the chemist is not yet prepared to say. He is now at work upon the analysis, however, and hopes to be able to determine the question in a few days.

The Iowa company that is engaged in the manufacture of this spurious milk has an agent in St. Louis who is busily engaged in canvassing the restaurants, milk-dealers, ice-cream manufacturers, and others in the city who use large quantities of milk, and investigations have developed the fact that large quantities of the spurious product have already been sold here.

A law passed a little more than a year ago fixes the standard of purity for milk in Missouri at 12 per cent. of solids, including 2.8 of butter fat; and of cream at 12 per cent. of butter fat. It will be seen that the Iowa product lacks a great deal of conforming to this standard, and for the sake of the public health it is to be hoped the proper authorities will enforce the law against the injurious counterfeit.

COMPOSITION OF MOXIE NERVE FOOD.—Francis Wyatt, says the *Medical World*, has analyzed Moxie with the following result: One hundred parts by weight when distilled were found to contain three-fourths per cent. alcohol and one-fourth per cent. of the essential oils of sassafras, winter-green and anise. The residuum in the report was evaporated to dryness, and contained 7.880 per cent. of extractive matter, consisting of

Sugar	3.810
Glucose	1.250
Sodium carb.	1.070
Sassafras	1.870
Gentian	1.870
Checkerberry	1.870
Quassia amara	1.870

PROPOSED NEW YORK LAW WITH REGARD TO THE EMBALMING OF DEAD BODIES.—A bill has been introduced into the New York State Legislature which provides that "it shall not be lawful for any person or persons to introduce into or upon any dead body of any person or human being, any poisonous substance, organic or inorganic, for the preservation of the same, or any so-called embalming fluids or materials of any kind, which will, in any manner whatsoever, interfere with chemical tests which may subseqently be applied or made use of by chemists in medico-legal investigations."

INTERNATIONAL OPHTHALMOLOGICAL CONGRESS AT HEIDELBERG.—The Committee announce that at this meeting, on August 9–12, 1888, discussions will be held on: "Glaucoma," introduced by Priestley Smith, of Birmingham, and Snellen, of Utrecht; "Cataract," by Gayet, of Lyons, and Schweigger, of Berlin; "Bacteriology," by Leber, of Göttingen, and Sattler, of Prague

MEDICAL ASSOCIATION OF GEORGIA.—At the recent annual meeting the following officers for the ensuing year were elected: President, J. S. Todd, Atlanta; First Vice-President, J. B. S. Holmes, Rome; Second Vice-President, E. R. Anthony, Griffin; Secretary, K. P. Moore, Macon; Censor, B. R. Doster, Blakely.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.—The following are the officers for the ensuing year: President, J. R. Laine; Secretary and Treasurer, G. L. Simmons, Jr.; Directors, the President and Secretary elect, W. R. Cluness, G. L. Simmons and H. L. Nichols.

PRACTICAL COURSES IN EMBRYOGENY.—Dr. Dareste, Director of the Laboratory of Teratology at Paris, began a course on normal and teratological embryogeny on April 10. The course, it seems, will be made permanent.

NEW JOURNALS.—The *Bolletino della Poliambulanza di Milano*, the *Omaha Clinic*, and the *Journal of the N. E. Virginia Medical Society*, are the latest new medical journals

MEDICAL ASSOCIATION OF ALABAMA.—At the recent annual meeting Dr. C. M. Baldridge was elected President, and Dr. B. F. Cross junior Vice-President. Other officers hold over.

EXPERT FEES.—The Supreme Court of Texas has decided that a doctor is entitled to extra fee for testifying as an expert when summoned by the court to do so.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U. S. ARMY, FROM APRIL 28, 1888, TO MAY 4, 1888

By direction of the President, Surgeon Remus C. Persons, U. S. Navy, is assigned, temporarily, to the charge of the Army and Navy General Hospital, Hot Springs, Ark., during the absence, on leave, of Major Richard S. Vickery, Surgeon U. S. Army, Surgeon in charge. S. O. 96, A. G. O., April 26, 1888.

Capt. A. A. De Loffre, Asst. Surgeon, granted leave of absence for six months on surgeon's certificate of disability, with permission to go beyond sea. S. O. 99, A. G. O., April 30, 1888.

First Lieut. Guy L. Edie, Asst. Surgeon, now under orders to report for duty to the commanding officer at Ft. Douglas, U. T., will accompany the Eighth Cavalry from Dept. of Texas to Dept. Dak., and upon completion of this duty will proceed to Ft. Douglas. S. O. 99, A.G. O., April 30, 1888.

First Lieut. W. D. McCaw, Asst. Surgeon, relieved from duty at Ft. Leavenworth, Kan., and ordered for duty at Ft. Crawford, Col. S. O. 48, Dept. Mo., May 1, 1888.

First Lieut. Ogden Rafferty, Asst Surgeon (recently appointed), ordered for duty at Ft. Clark, Texas.

Capt. Jno. V. Lauderdale, Asst. Surgeon, ordered from Ft. Clark, Tex., to Ft. Davis, Tex. S. O. 98, A. G. O., April 28, 1888.

OFFICIAL LIST OF CHANGES IN THE MEDICAL CORPS OF THE U. S. NAVY, DURING THE WEEK ENDING MAY 5, 1888.

Medical Director W. T. Hord and Surgeon T. Woolverton, ordered as delegates to represent the Medical Department of the Navy at the meeting of the American Medical Association, May 8, at Cincinnati. O.

Surgeon Geo. P. Bradley, ordered to Navy Yard, Brooklyn, N. Y., without delay.

CORRIGENDUM.

In THE JOURNAL of May 5, page 547, second column, the third paragraph from the bottom should read: The wound in the bowel was closed by a double line of silk sutures, the first being a continuous suture including only the mucous membrane; the second a continuous Lembert suture holding the peritoneal coats in apposition.